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# The Citrus Industry

THE ONLY PUBLICATION IN THE WORLD  
DEVOTED EXCLUSIVELY TO CITRUS FRUITS

Issued Monthly  
Representative of every interest—  
Representing no special interest.

VOL. 5, NO. 3

TAMPA, FLA., MARCH, 1924

15 CTS. A COPY



Dr. E. L. Eggleston is one of the nation's foremost dietetic authorities. The recognition which he accords to the value of citrus fruits in the diet means much.

The recognition which he further extends to the BLUE GOOSE trademark on citrus fruits is extremely gratifying to us.

American Fruit  
Growers Inc.

Orlando



The Battle Creek Sanitarium  
Battle Creek Michigan  
AUGUST 16, 1923  
OFFICE OF  
DR. ELMER L EGGLESTON

American Fruit Growers,  
Orlando, Fla.

Gentlemen:

During the past twenty years I have been observing a large number of chronically ill patients, particularly those suffering from digestive disturbances. During this time it has been very interesting to note the changes which have taken place in the diet of the average American family. Only a few years ago, the breakfast consisted of meat of some sort—sausage, beef steak, lamb chops, etc.,—potatoes, coffee and doughnuts. As a result of education, this has been changed. There are very few families in which fruit is not a part of the breakfast menu. Meats have been eliminated with, I am sure, decided advantage in conditions favoring the health of the family. Citrus fruits which were considered a great luxury a few years ago, are now considered a necessity.

The use of citrus fruits has done a great deal to prevent certain nutritional disorders which frequently were very prevalent. They are also of great value in preventing constipation which is very essential to the well-being of the individual, but even yet they could be more freely used to advantage. And since they require practically no digestion, they are indispensable in the sick room and in all conditions where it is desired to restrict the usual diet.

In the marketing of such beautiful fruit as you are doing under the label of the "Blue Goose" you are doing the public a great service and cooperating very closely with the medical profession.

Very truly yours,

*E. L. Eggleston*

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ORLANDO AND ORANGE COUNTY NUMBER

The  
**Napp Brand**  
**Trademark**



**An Unfailing Sign of  
Good Fertilizer**

NAPP BRANDS contain only the best of fertilizer materials, prepared so as to give substantial plant foods in readily available form.

No acid or acid-treated chemicals are used in the preparation of Napp Brand formulas. Kreiss Process Potassium-Phosphate supplies available phosphate without the use of acids, adding non-acidity to quality ingredients—the basis of every truly fine fertilizer.

For exceptional returns use this Quality Fertilizer-With-The-Acid-Left-Out.

**Non-Acid Fertilizer &  
Chemical Company**

Lakeland, Florida

Genuine NAPP BRAND Non-Acid Fertilizer is also manufactured

at

**BRADENTOWN**

**VERO**

**HOMESTEAD**

"Quality Fertilizer With the Acid Left Out" is the name of an attractive booklet which we have prepared for your use in planning your fertilization program. It tells how fertilizers are made and the ingredients which are included for the proper enrichment of all types of soil. Write today for your copy and for a price list.

# Plant Tangerines

During the past shipping season, Tangerines sold at uniformly high prices, opening the season at \$6.00 to \$6.50 per box and closing as high as \$10.00 per box F. O. B. shipping point. This in spite of generally low prices ruling for other citrus fruits.

The demand for this fancy citrus fruit is always great and it therefore brings uniformly high returns year after year.

For the first time in the history of this company we have ready for delivery an adequate supply of Tangerine trees. We have many thousands, all genuine Dancy, budded from our own commercial Tangerine groves.

They are one year buds on four year old rough lemon root systems. Sizes run  $\frac{1}{2}$ ,  $\frac{3}{4}$  and  $\frac{1}{4}$ , and every tree shipped will be a perfect tree.

*"GLEN TREES GROW"*

## Glen Saint Mary Nurseries Company

**Winter Haven**

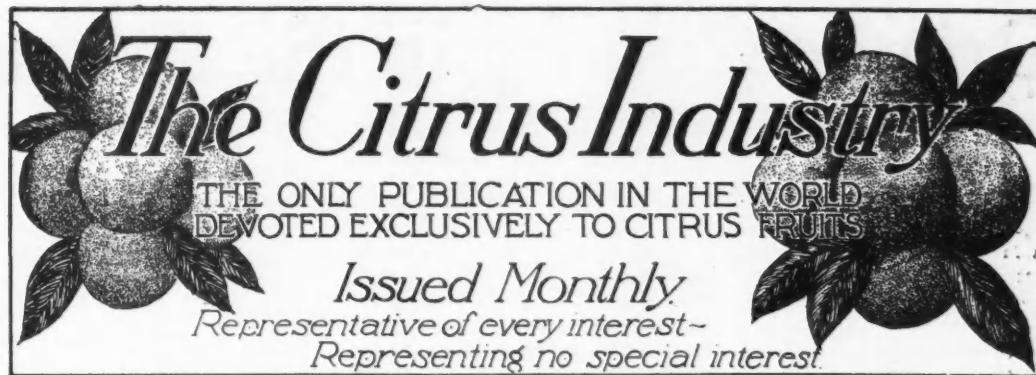
**Florida**

**Glen Saint Mary**

OVER FORTY-TWO YEARS OF SATISFIED CUSTOMERS HAS MADE  
THIS THE LARGEST CITRUS NURSERY IN FLORIDA

SOMETIMES there are pointed out to us certain cases where growers not members of our organization received as much for their fruit as did some of our members. But if it could be shown that every grower outside our organization was doing as well as any grower in it, it would prove nothing against cooperative marketing; rather it would be a tribute to cooperative marketing. For it was through the organization of the **Florida Citrus Exchange** that the fruit business as a whole was stabilized and brought to prosperity. And to point out a case here and there where a non-member received as much for his fruit as a member, only raises the question: How much would any of us be getting for our fruit if there were no **Florida Citrus Exchange**?

**FLORIDA**  
CITRUS EXCHANGE



Vol. 5

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## Orange a Great Citrus County

By Karl Lehmann

Only one county in Florida excels Orange in the quantity of citrus fruits grown and none equals her in the marketing of citrus fruits. Orange County is the real Citrus Capital of Florida, for the greatest part of her oranges, grapefruit and tangerines are marketed by agencies whose state and county headquarters are in Orlando, the county seat of Orange.

### Costs and Profits in Citrus Growing

Many questions are asked as to the costs and profits in citrus growing. It is quite impossible to answer these queries satisfactorily for any particular case, for citrus culture as an investment is complicated, though by no means uncertain. The returns that may be expected being influenced first by the care given and second by seasonal conditions.

In Florida the cost of planting and caring for a citrus grove during the first four years, or until it reaches bearing age, ranges from \$250.00 to \$500.00 an acre. This is exclusive of the cost of the land, but it includes interest at 8 per cent on the money invested and payments for all labor done.

The price of unimproved citrus land in Florida is governed by many factors, such as fertility, distance to city and shipping point, and the general standards and prosperity of the community. Desirable citrus land ranges in price all the way from \$50.00 to \$150.00, or even more, per acre. By careful search the investor of limited means can locate desirable land at a comparatively low price, as there

is plenty of low-priced land to be had in the less-developed communities.

The annual cost of maintaining a grove in Florida after it reaches bearing age averages from \$75.00 to \$150.00 an acre. When all or most all the labor is performed by the grove owner the cash expenditure of starting and maintaining a grove may be reduced a third or even more.

The profits in citrus growing vary even more than the costs. The returns from some of the best groves are very high indeed, while, on the other hand, there are many poorly cared-for groves that are maintained at an actual loss.

Orange and grapefruit trees in good soils and well cared for come to bearing age at about the fourth or fifth year, when they commonly yield from a fourth to a half box of fruit to the tree. The crop increases annually at the rate of about a quarter box for oranges and a half box for grapefruit until the trees come into full production about the tenth year. There are exceptional groves which yield 500 boxes per acre or even more of grapefruit or oranges in a single season, but only the very best groves average more than 200 boxes annually. The average yield for Florida, including the best as well as the poorest groves, is about 150 boxes to the acre, or somewhat less than two boxes to the tree. There are commercial groves in Florida producing profitable crops at an age of thirty or forty years.

Very heavy planting of citrus trees have been made in the last ten years,

and many growers fear the danger of overproduction. While it is true that enormous crops of fruit may be harvested in Florida in the near future, it is equally true that the market demand is increasing.

The increasing utilization of off-grade fruit through the newly developed canning process for grapefruit, the bottling of citrus-fruit juices, and preparation of candied fruit, will doubtless have a tendency to absorb the lower grades of fruit, thus steadyng the demand for the well-grown attractive product. The development of new markets through better distribution, and the stimulation of consumption through advertising are factors of importance in maintaining a balance between production and consumption.

### More and Better Fruit

More and better fruit could be produced on many groves, most groves, in fact, if more and better care and attention were given to these properties. Orange County has an expert citrus man as County Agent, whose advice and counsel is available, without cost to owners of groves. There are men and companies who make a business of caring for groves for absent owners and some fine groves are being developed under this plan.

Groves should be planted with rows wider one way than the other, getting more trees to the acre and leaving more room for proper working of trees between the rows. Closer spacing in the row increases yields for at least twelve years.

# Orange County in the Heart of Florida

By Karl Lehmann

Orange County is in the heart of Florida in every sense of the word, and that means much to this great section of this great state.

Orange County is in the exact geographical center of Florida and midway between the Atlantic Ocean and the Gulf of Mexico, giving it a mild, delightful climate with refreshing breezes blowing off its 1,500 fresh-water lakes on the warmest day in mid-summer and in the winter these bodies of water, including Lake Apopka, thirty-one miles long, afford an excellent frost protection for grove and garden.

Orange County is the largest shipping center for citrus fruits in Florida, all but one of the great fruit marketing agencies have their state headquarters in this county. Last season 915,000 boxes of oranges, grapefruit and tangerines raised in Orange County were packed and shipped from our packing houses bringing more than \$2,250,000.00 into this county for that crop alone, and in addition to that nearly 1,000,000 boxes of citrus fruit raised in other counties were packed in and shipped from Orange County packing houses. Nearly one-seventh of the entire crop of citrus fruit shipped out of Florida was packed and shipped from Orange County. This county has nearly 24,000 acres of groves and more than 3,000 additional being set this year. This county is rapidly forging to first place among the citrus-producing counties of Florida.

Orange County is a great producing section for melons and vegetables. Some 400 acres of melons in West Orange and 745 acres of cabbage, 836 acres of tomatoes, 150 acres of beans, 787 acres of lettuce and 1,875 acres of cucumbers, tell something of this county as a vegetable growing center. During the cucumber-shipping season an average of about forty-five cars a day move out from the section about Winter Garden, and at the height of the season, Winter Garden, Ocoee, Tildenville and Oakland ship an average of fifty-six cars a day, enough to make two solid trainloads of twenty-eight cars each, loaded with cucumbers which bring a fancy price in the waiting markets. The cucumber crop alone

brings more than a million dollars a year into Orange County. The lettuce and tomatoes from this section always bring a premium in every market in the country because of the superior product and packing for which Orange County is famous.

Orange County is the home of the Temple orange tree which has furnished the budwood for the Temple orange trees of Florida, "the \$10-a-box fruit." The largest producers of bananas in Florida are in the Pine Castle section of the county.

Orange County excels in the production of thoroughbred, prize-winning poultry, stock shipped from within the bounds of Orange County has won the highest honors in shows in eight states. Birds from Orange County shown at the Coliseum Show, Chicago, won first prize with nine other states competing.

Orange County is the center of the good roads system of Florida with 663 miles of improved roads built and building; a \$3,000,000.00 bond issue for good roads carried with a large majority. These roads are now being built, connecting every part of the county within a two hours' drive over excellent roads to the finest ocean beaches in the country.

Orange County has fine towns, churches and schools and this year has built nearly \$350,000.00 worth of new schoolhouses and improved many others. No county excels Orange in educational opportunities it offers, running from excellent elementary schools up to Rollins College, at Winter Park, Florida's oldest institution of higher learning.

Orange County has a half million acres that can be bought at from \$50.00 to \$100.00 an acre, land that is fine for raising oranges and grapefruit, gardens and trucking. Improved farms and groves can be had at prices varying from \$1,000.00 to \$3,000.00 an acre and highly developed property brings higher prices.

Orange County offers many attractions to the tourist as well as the settler. Fine fishing in hundreds of clear, sparkling lakes, boating, swimming and golf every month of the year. Amusements of the finest sort abound, the best music of the country

is heard during the year in Orlando and other centers of the county.

Orange County has a live, wide-awake Chamber of Commerce, supported by public taxation, which helps to attract the people to this splendid county and helps them locate and make a success after they have decided to come to this part of Florida.

Orange County has 156,000 head of cattle, including some 6,000 pure-bred, first-class stock, some of the finest in the state.

Orange County has the best organized public health service of any county in Florida. Every assistance is given to making and keeping Orange County a healthful place in which to live.

Orange County has a most efficient County Agent, C. D. Kime, and County Demonstration Agent, Mrs. Nellie F. Taylor, who are the expert advisors to all in matters pertaining to grove, farm, garden, poultry and everything else that goes to make life profitable and pleasant in this county.

Orange County has two daily newspapers, The Orlando Sentinel and The Orlando Reporter-Star; four strong weeklies, The Winter Garden Herald, The Apopka Chief, The Florida Sun (Orlando), and The Winter Park Herald, and a weekly paper sent out by the Rollins College called the Sandspur.

Orange County has a great county seat city, Orlando, the city that has grown in ten years from a population of 3,892 in 1910, to 9,282 in 1920, to 23,321 in 1923, and bids fair to become a city of 30,000 by 1930. Orlando's building permits far exceeded \$3,000,000.00 in 1922, and 1923 will see that record surpassed.

Orange County has a progressive, far-seeing and hard-working people. They believe in this great "Inland Empire" of Florida, they love its climate, its soil and its opportunities. They have come from all parts of America and other nations of the world; here they are working side by side in the finest possible spirit of co-operation and enthusiastic boosting to make this the greatest state in the country and the world.

## Great Heritage in the Name Orange

Hon. W. A. MacKenzie, member of the Florida legislature from a neighboring county, in speaking to an Orange County audience, said:

"I consider it an honor and a pleasure to speak to you great people of Orange. There is an inspiration here to one in whose soul burns the love of progress and whose eyes drink thirstily and happily beauty such as you have—beauty which I consider a nectar brewed by the smiling gods themselves.

"I wonder if you realize what a wonderful heritage you have in your name alone. You have wealth, beauty, enchantment—yet that inspired prophet who gave to your great country the name of Orange, bequeathed to you a treasure greater than gold, aye,

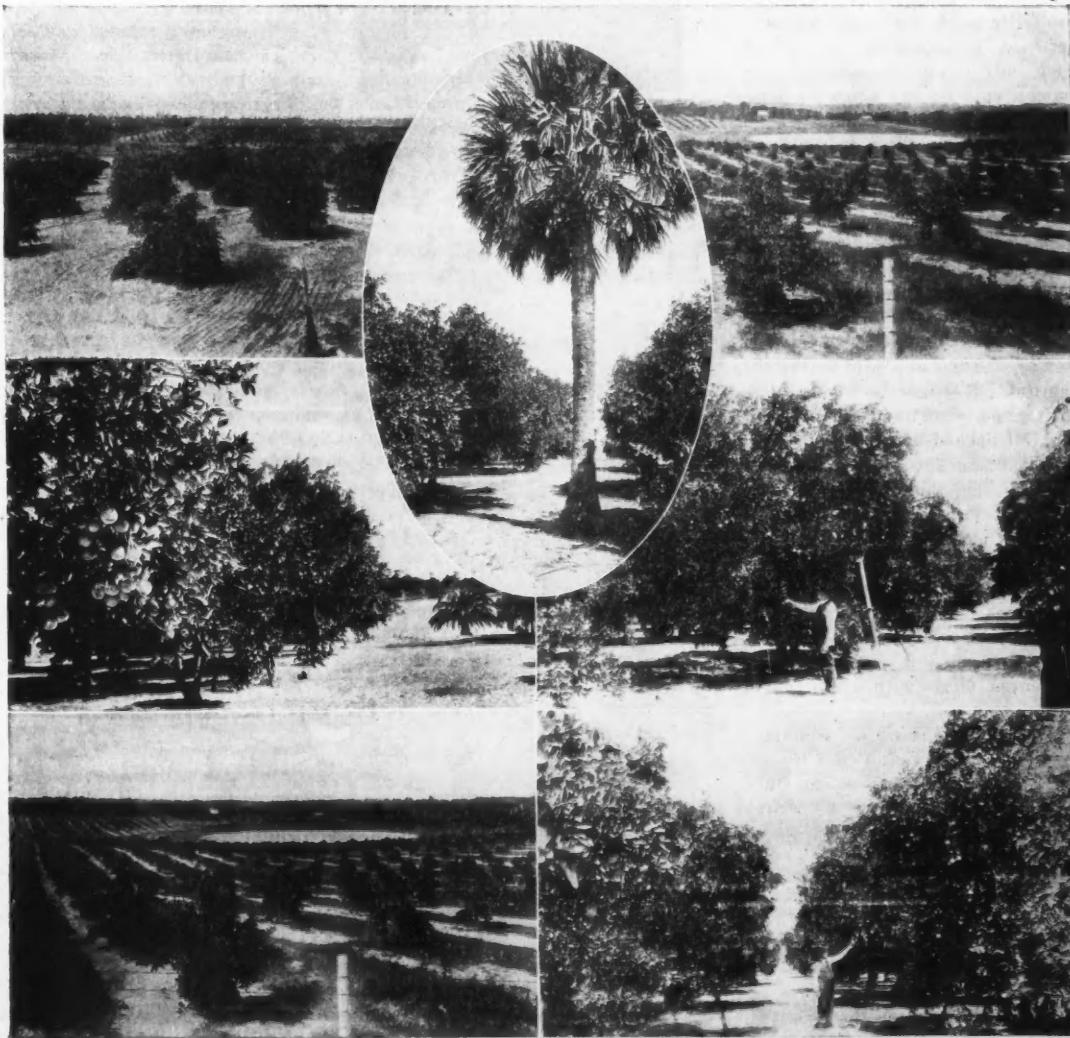
much fine gold.

"Orange—the name lingers with one like a note from an anthem of the gods. It lights up the gloomy shadows of the North and makes men yearn for you and yours. As it falls from admiring lips, it brings forth visions of the beautiful; it tempts the ice-bound Northerners with the gold of clustered fruit, the emerald of the graceful bending bough; it cools his palate with the sparkled juiciness of that royal gilded globule from which it is so fitly named. It tramps before the brain the panorama of pine-clad templed hills, mantled with their million hues of green; of turquoise lakes set like jewels in the bosom of magnificent promise; of roads of velvet; of trucking plots waiting for the touch of

inspiration and effort to make them feed the world; of fruit, flower and fragrance woven all by hand of friendly Destiny into a woof of enchantment to cover the needs of a waiting people—a waiting people who but pause to hear your welcome to come and be convinced.

"Orange—ah, how well he who named you knew you—how nothing can compare or rhyme with it—how in its golden promise it will stop the world and make them listen to your message and pour a seeking people within your smiling gates."

Burn immediately all trimmings from pruned trees and vines. This destroys injurious insects and diseases.



Among Orange County's Citrus Groves

# Orlando, The City Beautiful

You'll Want to Stay

(From The Orlando Magazine)

A stranger coming into Orlando, whether by train or automobile, gets first the impression of beauty. Beauty in the score of lakes around which the city has been built; beauty in the homes which surround them, with wealth of flowers and spacious grounds; beauty in the thousands of trees which give shade and distinction to The City Beautiful. Its 50 hotels and boarding houses offer the visitor every convenience which one could have in any metropolitan city.

Orlando is a City of Homes, not only beautiful in architecture and setting, but homes which possess a soul and reflect in the members of the family a hospitality as cheery as the fire on the hearth; a consideration for others which only close companionship and common purpose can bring to perfection and a loyalty that could never be questioned.

Orlando has in the Albertson Public Library a quality of literature and a classic building for its housing, of which a city many times its size could be justly proud.

The building is Greek-Doric in architecture, harmonious in every line, and complete in every detail, a material asset to Orlando and worthy the City Beautiful. It suggests in itself the uplifting purpose for which libraries stand. It opened with 25,000 volumes.

Orlando has advocated for many years the building of good roads throughout Orange County. Drive where you please around Orlando, upon roads unsurpassed in smoothness, grade or beauty, and you will observe a territory resplendent with pretty homes and sparkling lakes, orange groves unexcelled in beauty and productiveness, farms with every convenience.

Transportation facilities are amply provided by the Orange Belt Auto line, which has erected a handsome building in the heart of the city, from which busses leave on regular schedule from Orlando to the coast cities, as well as the important inland towns, reaching as far as Daytona on the north, and Ocala to the west, and connecting in schedule with bus lines through all portions of the state. One hundred and thirty busses arrive and depart each day from the local terminal, the building of the company being so constructed as to easily handle five hundred arrivals and departures



a day, and the line carries nearly 60,000 passengers a month in and out of Orlando, alone.

#### Orlando Sunshine Club

One of the most important of the many organizations which serve the varied needs of the city is the Orlando Sunshine Club. It is composed primarily of winter visitors, its membership numbering about one thousand, and operating under the direction of the Orlando Chamber of Commerce. During the winter season, not only its thousand members, but thousands of tourists passing through the city enjoy the grounds and games provided by the city. A delightful habit of the Sunshiners is that they always come back, and with them many families urged to Orlando by their favorable reports. Sunshiners have come here and brought others into their membership to adopt Orlando as their six-months-home; perhaps their permanent home when once the Florida sand is in their shoes.

The interest of Orlando's Sunshiners in the city is proven by their large investments in property and groves, and in appreciation of this organization, Orlando has set aside five acres in Exposition Park, exclusively for the Sunshine Club, built 24 horseshoe-pitching lanes for the Slipper-slammers four roque courts, eight lawn bowling rinks, shuffleboard, card rooms, and a community house, all amply shaded and beautified with shrubs and flowers, besides allowing for the necessary expansion and additional courts which are to be required.

Orlando has the only Symphony Orchestra in Florida, playing exceedingly well programs of the best music. Ros. V. Steele, the conductor is receiving deserved praise for himself and his musicians who are thus adding so materially to the cultural advantages of the City Beautiful.

The Orlando Art Association recently organized with over fifty charter members, has already had two exhibitions of merit in the Art Room of the Public Library, and has a number of exhibitions booked for the balance of the tourist season. The association seeks to serve all of Central Florida, and to develop interest in Art in its broader and most comprehensive sense.

Orlando has six theatres, with latest releases in silent drama, and also many splendid theatrical productions, dramatic and musical comedies.

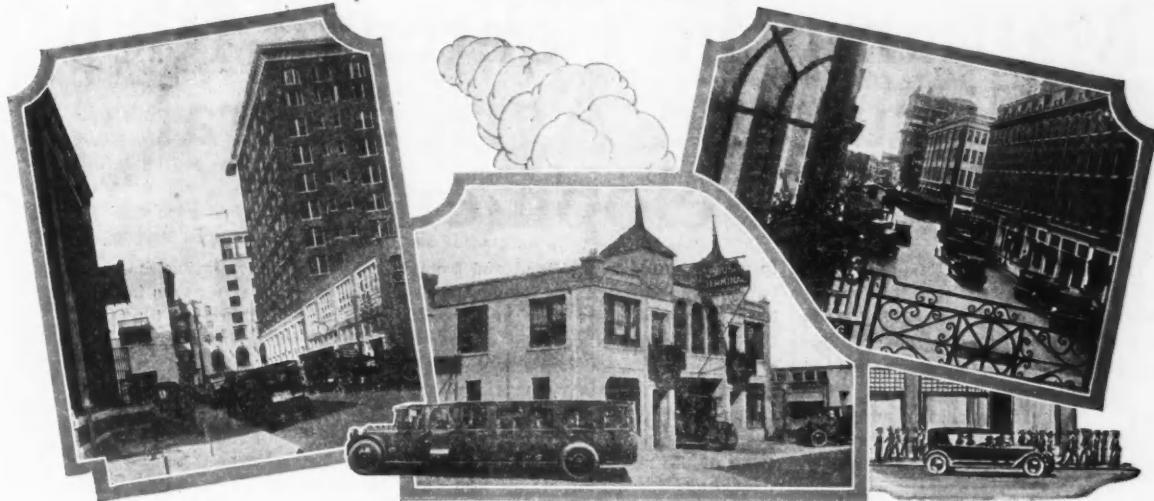
#### The Country Club

The Country Club is close at hand with 18 tricky holes that par at seventy, grass greens and rolling fairways, water hazards, and a most perfectly planned club-house. Located only 1 1/2 miles from the center of the business district and quickly accessible over brick roads, the Country Club offers every facility for recreation, clear-water bathing, daily luncheons, dinner parties and semi-weekly entertainments, constituting the rendezvous of the social set. The club-house is most commodious, its wide screened porches overlooking, from a central location, several attractive fairways, through a beautifully shaded woodland of oaks and pines. Eighteen beautifully planned fairways stretch along an undulating course, around clear water lakes, a water hazard, and through pleasant woods which form a striking background and an added attraction to the pastime.

"Duds dread" is the significant and fitting name of the new stag course of 18 holes which offers particular advantages to men who come for hunting and fishing and golf in the winter time. It is said by experts to be planned for one of the most difficult links in the South.

Sarazen and Hagon have been giving some wonderful exhibition golf at the Orlando Country Club this season, and as an added attraction for visitors will be here next year in exhibition golf.

Orlando is a city possessed of good sportsmen. It has league baseball,



ORLANDO, FLORIDA'S SEVENTH CITY IN POPULATION; FIFTH IN INDUSTRY

the Orlando Bulldogs, its pennant winning aggregation, being supported entirely from the city's baseball enthusiasts. A new athletic field and baseball park equal to any in the South shows the enthusiasm with which all athletic enterprises are supported, the new field bearing the name of Tinker, after the popular shortstop of the famous Chicago Cub machine, Joseph B. Tinker, who has made Orlando his home. For the spring training season the Cincinnati Reds will take advantage of the splendid base ball plant at Orlando and its wonderful climate for conditioning their players.

The Columbus Senators will also train in Orlando, using the diamond at Exposition Park. Both teams will be here all during March and Commissioner Landis will spend the first week here, making this the first stop in Florida where he will visit the nine major league teams training in the state this spring.

The Annual Floral Pageant will be in April, and many of the visitors

will have the pleasure of seeing one of the worth while features that are distinctively Orlando's. The floats are decorated only with real flowers, plants and shrubs, no artificial flowers being permitted in the parade or show. The contestants usually run well over the hundred mark, to which are added the many individual automobiles decorated for the occasion and the entries of the business houses in feature floats. It is a gala occasion, and a joy to see such a display of natural flowers as Orange Avenue represents along the line of march, the city taking on the appearance of a veritable avenue of roses. Mr. M. J. Daretwyler is Chairman of the Committee for the Pageant and has plans for a wonderful event.

#### Orlando In Summer

An exposition of the charms and advantages of Orlando would be incomplete without mention of its delightful summer climate. Those who have never spent a summer in Florida perhaps have imagined it as uncomfortably hot. This is entirely wrong, for

Florida has a summer climate not found in any other portion of the country. There is always a refreshing breeze, both day and night, the evenings being especially delightful, and it can be said without successful contradiction, that light cover is always welcome and most often necessary during early morning. The days are warm, but lack the enervating humidity of the North, and sunstroke and heat prostration are practically unknown in Florida. The abundance of shade in Orlando and its location half way between the gulf and ocean make it especially desirable as a summer resort, the breezes of the Atlantic during the day and of the Gulf at night fanning the city throughout the summer season, making Orlando exceedingly popular as a vacation center.

Why not start a dairy improvement club in your community?

In writing to advertisers, please mention The Citrus Industry.



# Maitland the Center of Rich Citrus and Agricultural Developments

One of the best little towns in Orange county is Maitland, from which there is shipped annually 150,000 boxes of citrus fruits to the northern markets, besides the thousands of boxes taken out by truck to other nearby towns for packing and shipping. The American Fruit Growers operate a modern plant here with a capacity of ten cars of fruit per day. Groves in Maitland produce thousands of boxes of the famous "Blue Goose" brand of fruit, while quantities of choice fruit are marketed through the Citrus Exchange and by other agencies as well as by the growers themselves.

#### Location

The town of Maitland is situated on the Dixie Highway, the main route from Jacksonville to Tampa, eight miles north of Orlando. The Atlantic Coast Line railroad furnishes adequate and convenient service to all points north and south, while bus lines connect with all important places in the vicinity. Truck express service from Sanford makes it possible to use the Clyde Line boats from Jacksonville for freight as well as passenger service. The new highway from Orlando to the east coast brings the ocean within two hours drive of this district. There are fourteen clear water lakes within the town limits of Maitland, dotted with attractive homes and beautiful and productive groves.

#### Historical

Maitland was established as a fort in the days of the Indian wars, taking its name from the commander of the block-house, Captain Maitland, who built on the shores of the lake which now bears his name.

The town was incorporated in 1885 and has since been developing along the lines laid out by far-sighted developers such as the treasurer and general manager of the South Florida Railroad, later the Plant System, now the A. C. L., who made their homes in Maitland in those days. The first ice manufacturing plant in Florida was built at Woodbridge, now a part of Maitland, and supplied ice to all points from Jacksonville to Tampa. Some of the first orange groves in the coun-

ty were planted in Maitland and from two of the large nurseries operated here before what is now known as the "big freeze" thousands of trees were shipped to California in the beginning of that state's entry into the citrus industry. Lake Maitland, the largest lake in this district now boasts some of the most beautiful estates in Orange county, among others "Gate o' the Isles," the home of Irving Bacheller, the noted author, who now makes Orange county his home. An old established town of 400 population, Maitland is the center of a rich rural community served by two rural mail routes from the local postoffice. While steadily developing and sharing in the general prosperity of this section, Maitland has never been exploited and has thus escaped the artificial inflation of land values. The beauty of the lakes and the shaded streets and the proximity to Winter Park and Orlando with the resulting conveniences make Maitland an ideal home for those who prefer country to city life.

#### Industrial

Most of the land in this vicinity is excellent for citrus culture and there are hundreds of acres of old groves as well as others which are just coming into bearing. The land along the lakes and streams is splendid trucking land, and as this industry has not been fully developed in this immediate neighborhood, the local markets alone offer great opportunities. This condition is true also of poultry raising and dairying, neither of which industries is now sufficient to meet the demands. Lands in this section are especially well adapted to the growing of asparagus and other ferns for northern florists, and the industry has grown to considerable importance. Within the territory served by the Maitland rural routes there are 100 acres of asparagus ferns growing under cover and the daily parcel post and express shipments to all parts of the United States is astonishing. The perpetual blossoming season and mild climate together with the healthful general conditions make bee-keeping of commercial importance in this sec-

tion, one grower stating that his bees make two to four seasons in one year, and that then there are tons of honey going to waste for lack of bees enough in the neighborhood to collect the nectar.

#### Civic Activity

An active Chamber of Commerce is co-operating with a long established Civic Association in making Maitland a better place in which to live, and in bringing to the town more and more desirable citizens. A progressive and active town government is now busy putting in such improvements as are necessary and desirable to insure the present and future prosperity of the town. Methodist, Presbyterian and Episcopal churches offer to all the opportunity of attending divine services. A number of organizations, Woman's Club, Parent-Teachers Association and a Band are all helping to stimulate the social and intellectual life of the community.

#### Educational

A new and modern four-room concrete school building with complete modern equipment is situated in the midst of large and beautiful grounds. This school doubled in numbers within six months after entering the new building and has the highest standing among the schools of its class in Orange county. The Winter Park High School, one of the finest in the state, is only two miles from Maitland. At Winter Park is also situated Rollins College, which offers excellent collegiate training to those who wish to extend their education beyond the regular public school courses. The Maitland Public Library, established twenty years ago, is now housed in a beautiful and artistic brick memorial building, under the control of an active and intelligent Library Association, and is kept up to date, rendering excellent service to the community. The library building is the center of the social activities of the town, where lectures, socials etc. are held.

More and more people are finding this little city just about what they have been looking for, a place to live and make a living and enjoy doing both.

# Capps on Citrus Distribution

Whatever assistance in the way of emergency reduction in freight rates may be given the citrus industry of Florida must be conditioned upon the understanding that the growers and shippers must get together on some plan for a proper and effective distribution before another season.

At a meeting in Jacksonville, Tuesday, February 12th, of the executive traffic officers of the Florida railroads and a committee representing the Growers and Shippers League, Charles R. Capps, first vice president of the Seaboard Air Line, speaking for the Florida railroads, said:

"We will take your request for an emergency reduction in citrus fruit rates under consideration and discuss it with our connections. We are not yet prepared to tell you even our own attitude in the matter, but we wish to make it very clear to you that whatever, if anything, we may do in the way of emergency reductions in rates must be understood as in no way establishing a precedent and must be conditioned upon the understanding that, before another season, the growers and shippers must get together on some plan for a proper and effective distribution."

Further commenting and explaining his statement at Jacksonville, Mr. Capps gave out this interview in Tampa: "I am firmly of the opinion that Florida can market a 20,000,000-box crop and I do not know that I disagree with the president of the Florida Citrus Exchange, who said that Florida could market a 50,000,000-box crop. Of course, Florida cannot market a 50,000,000-box crop this year, nor next year; but it should be able to market it by the time it reaches the point of a 50,000,000-box production; however, it cannot market 20,000,000 boxes, nor will it ever market 50,000,000 boxes, as long as there are a great number of marketing agencies all dumping a large part of the crop in a few of the larger markets. The crop cannot be disposed of, nor can prices be maintained if the marketing agencies are going to run into a point like Chicago 200 or 300 cars more than the Chicago market will take. This year, Florida and California together have about 45,000,000 boxes of citrus fruits. This includes oranges, grapefruit, lemons and limes. There is some little export movement and there is the whole of the United States and Canada to consume the balance of it.

This means an annual per capita consumption of somewhere between one-fourth and one-third of a box. This is not a large per capita consumption, if the distribution is reasonably widespread, but it is an enormous per capita consumption if citrus fruits are marketed only in the cities and in the larger towns, and the small town, the village and the country people given no opportunity to obtain citrus fruits in competition with other classes of fruits.

"As I see the situation," continued Mr. Capps, "the proper marketing of Florida's citrus crop does not stop with the placement of carloads of citrus fruits in the larger markets. The retail end of the business needs some consideration at the hands of Florida's marketing agencies. It means a great deal to Florida whether its fruit retails for 25 cents for a dozen oranges or 25 cents for three oranges. Though none of the recent articles in the Florida papers have said anything about it, unquestionably there is an important degree of competition between citrus fruits and other fruits coming into the market simultaneously. This season, the United States has had its banner crops of oranges, grapefruit, apples, and grapes. In the first two and one-half months of the citrus fruit season the shipments of apples and citrus fruits were approximately 20,000 cars heavier than last year. Of this increase, apples represented approximately 12,000 cars. Apple prices are way down, and the condition of the apple grower this season is not different from that of the citrus fruit grower. Had the apple crop been a failure, the citrus fruit grower would undoubtedly have been better off and, on the other hand, had the citrus crop been a failure, the apple grower would have been better off. Increased production cannot be taken care of by decreased freight rates. Increased production can only be taken care of by wider distribution.

"The principal trouble with Florida growers is the lack of cooperation between the selling agencies. This lack of cooperation grows out of many things. Some of the selling agencies have fixed commissions and then there are fixed packing charges, which carry fixed profits. Selling agencies which have these fixed returns receive their returns whether the fruit they handle sells for \$2.00 a box or \$10.00 a box. The annual income of

such a selling agency is not regulated by prices, but is wholly dependent upon the volume of business which it does.

"A similar situation existed just thirty years ago when oranges got below 50 cents a box on the trees. I am not pessimistic—I never have been anything but an optimist as respects the state of Florida and I am satisfied that this situation can be worked out if the people of Florida will go at it in a broad-minded, business-like sort of a way. Certainly, it will never be worked out if the growers, who are the people who have the real interest in the matter, are going to continue to subject their interest to the competition of their own selling agencies, rather than stand as a unit having to meet only the competition of the products of other states and countries.

"When the business men of Florida who are most concerned with the proper and logical development of the citrus industry approach the question unselfishly, the problem will be solved but certainly we are not going to get anywhere as long as everyone continues in the position of being willing to 'sacrifice his wife's relations.'

## LEARNING FROM CALIFORNIA METHODS

Sensing the advantages gained by pursuing their industry along more modern lines, a convention of the fruit and vegetable exporters of the Spanish Levant region recently met at Madrid for a discussion of the conditions affecting their overseas trade. According to a report to the Department of Commerce from Assistant Trade Commissioner James G. Burke, the yearly arrivals of increasing quantities of California citrus fruit in British markets is causing concern to the Spanish growers and exporters. Several have already been to California and have returned with stories of the remarkable development of the American fruit growing and handling. The trend of the sentiment among the Spanish growers is toward the abandonment of their antiquated marketing and the adoption of the cooperative methods so successful in the United States.

The plowman is a-plodding his weary way, and soon the seed will be a-bursting in the ground; another crop year is beginning.

# The Citrus Industry

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By

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## GROVE CALENDAR FOR MARCH

## Timely Suggestions for Grove Work During the Present Month.

Keep the Acme harrow going every week or ten days in the citrus grove; frequent cultivation checks loss of moisture required by young fruit.

Trim nursery stock, preparatory to budding; start budding if stock is ready.

Spray to control melanose and scab of citrus with 3-3-50 bordeaux-oil emulsion (1 per cent oil); apply spray ten days after petals fall.

Pick up and destroy wormy peach drops and lessen later damage from curiulio (wormy peaches). Spray or dust pecans with lead arsenate, as the leaves come out, for case borers and bud worms.

## IS FLORIDA TO BLAME?

Is Florida itself in some measure to blame for the present unsatisfactory condition of the citrus markets in the North? One leading fruit authority evidently believes that Florida interests themselves are doing much to protract, if indeed, they did not create, the present unsatisfactory conditions. Under the caption, "Not So Gloomy Please," the Fruitman's Guide of recent date printed the following as a leading editorial:

It looks to a man up a tree, armed with a spy glass, that much of the trouble in the Florida citrus situation is really due to the excessive pessimism existing among the growers of the state itself, which in turn has permeated the buying centres. Too much gloomy talk has come out of Florida. Certainly the GUIDE cannot be accused of wishing to misrepresent the trade through crop or market conditions. It does, how-

ever, believe that to a very noticeable extent markets are a matter of psychology and that the mental attitude of the trade will at times help to strengthen or weaken such markets. It is part of an intelligent, broad-minded shipper's business to try and correct any false impressions as to supply, and it is in line with the industry's best interests at both the shipping and marketing ends that he should try to do everything within the facts of the case to get the idea out of the minds of buyers in the country's market that they are not justified by conditions in paying reasonable prices—prices which should mean at least around cost of production to the grower.

Take the situation as it stands right now as throwing a light on the outlook for the balance of the season. There is no doubt but that losses to both the orange and the grapefruit crop on account of the very heavy droppage have been serious, and that these losses by reason of this droppage are bound to have a very material effect on total shipments. These droppage losses, together with the fact that shipments of oranges and grapefruit to date of this writing are approximately 3,000 cars heavier than they were to the same date last year, would indicate that there will be no more—even if there is as much—citrus fruit shipped out of Florida during the remainder of the season than was shipped during the same period last year. And last season at this very time oranges were worth around \$1.50 and grapefruit around \$1 a box more than prices now ruling.

Certainly with no more fruit to be shipped during the remainder of this season than was shipped last year during the same period, and with the extremely reasonable prices ruling (though to growers and shippers the word "reasonable" will strike home with a certain grim irony) it is the fairest of assumptions that the trade is justified in purchasing freely at such prices, and with their purchases push the sale of Florida oranges and grapefruit, and do their darndest to work themselves into a position where they can at a commensurate and consequent to themselves pay the Florida shippers higher prices than at present—prices that will bring the growers out with at least cost of production. After all, this is a business of Live and Let Live, and the man who always tries to buy at the bottom and sell at the top is bound to get hurt more times than not. That the grower should get a living return for his fruit is to the best interest of the man who at the marketing end of the line buys and distributes the fruit, and there is no reason why the trade could not afford to pay twenty-five to fifty cents a box more than present prices and help the growers out, and this to their own advantage. It would mean practically no difference whatsoever in the prices paid by the consumer.

But as long as Florida itself continues to throw out clouds of gloom as the cuttle fish throws out clouds of ink, one can hardly blame the buyers in the markets from also taking a gloomy view of the situation under this psychological spell and buying as close to the bone as

possible." A more optimistic spirit in Florida, and this is warranted by the present statistical situation, is the first requisite to get the buying trade to loosen up, take more freely, and take more at a higher price all around.

#### FLORIDA AT MADISON SQUARE GARDEN

Mr. L. D. Niles of Lucerne Park, who attended the Florida exhibit at Madison Square Garden, New York, writes The Citrus Industry his impressions of the show as follows:

The Madison Square Garden boys tell me that the Florida Show went over with a "bang," which is their expression for a success in the show line.

The interest shown by the public in Florida and her products was astounding. Although we arrived in town with apparently no advance publicity, still by Thursday with very disagreeable weather conditions to contend with; the attendance of paid admissions was reported over 34,000 on that day. The last three days of the Show, the Garden was jammed; said admission receipts going to Mr. Ringling because he donated the Garden.—The Florida Counties exhibiting paying all other expenses of the Show. Baron Collier should receive credit for the street car advertising space which he donated.

Our display of tree ripened Citrus and various tropical fruits created quite a sensation, for the New York public had no idea we could or do produce such a vast assortment of the fruits in Florida and their eagerness to procure them is only one convincing argument that we must make a market for our fruits—not Citrus alone—they are clamoring for everything we have, but are unanimous in objecting to our present methods of distribution and the extremely high prices which the ultimate consumer has to pay both in the retail markets and all places where fruit is served. Twenty to thirty-five cents for one portion of Grape Fruit and same prices for a glass of adulterated Orange Juice being considered very moderate indeed and to some of us who are producers with account sales in our pockets showing sales which are in the red around \$1.90 per one-half box, it looks (to express it very mildly) that the wrong party is getting the best of the present marketing transactions.

We could have given away twice the amount of literature and the interest taken in Florida certainly surprised everybody.

However, the weather has about used up this bunch of Florida crackers and several are quite sick with colds. Have large numbers of interesting pictures and items of interest concerning the Florida State Exposition—"Everything Shown But The Climate."

#### ORANGE COUNTY AND CITRUS

The Citrus Industry this month devotes considerable space to Orlando and Orange county—the former as the center of interest and activity in the marketing of citrus fruits, and the latter as the second county in the state in the production of Florida's most valuable crop.

Both the city of Orlando and the county of Orange are recognized as among the most important factors in the growing and marketing of citrus fruits, and it gives The Citrus Industry a great deal of pleasure and satisfaction to present to its readers some of the many interesting and important features connected with the industry in this county and city.

To Karl Lehmann and others who contributed to this number, The Citrus Industry desires to tender its thanks.

In connection with the letter of Dr. E. L. Eggleston appearing in an advertisement in this issue, it is interesting to note that his spelling of "citrous" is a bit unusual. However, he is eminently correct. Authorities permit of either "citrus" or "citrous," the latter, however, is more in accordance with medical terminology, while the former may be said to be the commercial form of the word.

#### ARE YOU PUTTING BACK?

"Did you ever figure just what proportion of your profits from the fruit was being put back into the grove in fertilizer and other cultural practices?" asks Frank R. Brann, Horticultural Commissioner of Tulare County, California.

Mr. Brann declares that three hundred and twenty-five dollars out of every one thousand dollars of net receipts should be put back into the grove in fertilizers alone.

And, furthermore, he says: "The growers must get over the practice of figuring their fertilizer needs by the number of acres in the property. For accuracy in caring for the needs of the trees the growers should figure just what percentage of the surface is covered by the trees, and then figure the fertilizer on the basis of the number of square feet of surface left between the trees, making increases in amounts to correspond to tree requirements.

"As the trees increase in size, the tillable surface soil correspondingly decreases in area. As the trees become larger they necessarily require more plant food, thus we find it necessary to administer a larger amount of fertilizer per square foot of tillable surface soil.

"In my opinion, the proper care of citrus orchards should be based entirely upon individual tree requirements, rather than merely the acreage basis of estimating."

Of course, Mr. Brann's observations are intended to apply to conditions in California but we believe that there is much in his conclusion which might be profitably applied to conditions existing in Florida groves: Is it not possible that some of our groves are being under fertilized and others over fertilized because of old accepted practices which are now faulty?

The Citrus Industry recently printed an article from a leading East Coast grower concerning the relative keeping qualities of high grade fruit between that which was grown through the use of a liberal policy of fertilization and that which was not.

Have you joined a "Better Fruit Club?"

# Florida as Seen by a New Yorker

By Joseph S. Jordan in New York Evening World Feb. 21

Florida, the prodigal fruit land, land of eternal summer in the winter time, fisherman's paradise and the sportman's happy hunting ground, birthplace of pretty women and fine hearty fellows and America's greatest winter playground, has been captured by New York and is now hemmed in in all its beauty, show and pomp of its rich products in Madison Square Garden. For the first time in its history the gladiatorial arena in Madison Avenue has proved worthy the name of Garden. Last week they had a dog show there, rounded out with a boxing contest on Friday night; next June there will be the greatest Democratic National Convention ever held in the country; next week there will be something else, but this is the week to go to the Garden.

Why go to Palm Beach, unless of course you're Dave Knott, and looking for a close shave for Mayor; why to Miami unless to untie the same Knott, to Tampa, to Fort Myers, to Jacksonville or Sarasota, when for 50 cents and carefare you can go to Madison Square Garden and get all the Florida atmosphere there is in the State and learn all about Florida from the hustling, obliging representatives of the Flamingo State?

"We brought everything from Florida but the climate," says one Flamingo booster, and sure enough they did. In the show at the Garden twenty-two counties out of the forty-six are represented and there are on exhibition fruits and citrus fruits, winter vegetables, fish, nuts, ferns, spuds, palms, peppers, lettuce animals and **Floridian boosters**.

"We didn't come here to sell anything," said Mr. Morton M. Milford, owner, proprietor and editor of the Fort Myers Press. "We haven't got anything to sell, that is, except at home. We are not offering land, farms, ferns or bathing resorts, although everybody knows all about our bathing beauties and the irresistible fascination of our bathing beaches; of our cigars. Yes, we have no bananas, but look at our Blue Goose grapefruit, our oranges and our breadfruit, the manna of heaven imported

from Mesopotamia, and our castor bean, from which is extracted your castor oil.

"I am speaking of Lee County and would like to call your attention to the fact that there has been no mention of castor oil in the oil scandal at Washington; maybe there will be before the cleaning out process has been completed. But this exhibition is a purely educational campaign, to let New York and the world know what we have in Florida. We have brought tons of fruits of all kinds with us, and we are giving it away as fast as we can to the hospitals and wherever else it will bring balm to the afflicted. As I said, we have nothing to sell, What we have we want to give away."

Mr. Milford is an Indianian by birth, a Kentuckian by adoption and a Floridian for evermore. After graduating from Wabash College, Crawfordsville, Ind., in 1904, his first newspaper job was on the Indianapolis Sentinel. Tom Taggart, the Democratic boss of Indiana, was Mort's first boss, and Tom's bossing things ever since in the Hoosier State, and he and the Florida editor are still the greatest of friends. They share the same views on many questions and there is no difference of opinion concerning Gov. Smith's fitness for the Presidential nomination. Mr. Milford was for ten years Washington correspondent for the Louisville Courier Journal and the Times and enjoyed an intimate friendship with "Massa" Henry Watterson. He bought the Fort Myers Press in 1919, of which the Tampa Tribune said editorially: "The Fort Myers Press is the best little daily in all Florida."

Four years ago Mort was in New York at the head of the publicity bureau of the National Democratic campaign, and he will be in the same old job again next June. Lee County boasts of the only Brazilian nut tree listed with the Department of Agriculture and it stands in the grounds of the Royal Palm Hotel at Fort Myers.

Collier County adjoins Lee and used to be part of it. But our own Barron Collier, Deputy Police Commissioner and illuminating light of Luna Park,

wanted a county all to himself, and so the last Legislature of Florida cut Lee County three ways, dividing it as Gaul was divided in the olden days. Now it is Lee, Collier and Hendry Counties. J. T. (Jack) Taylor is in charge of the exhibit of Collier's, and is assisted by Mrs. J. M. Barfield.

In the exhibit of fruits, nuts and palms are two Seminole Indians, Josie Billy and Johnny Cypress and they have with them an exhibit of their own; beads, dolls, cypress spoons and a big canoe dug out of a cypress tree, bearskins, otter, coon and deerskins, stuffed jewfish, tarpon, redfish, jackfish and moonfish. The canoe was made by Big Chief Conapatchee, who is now with the Great Spirit in the Happy Hunting Grounds.

#### FIRST SIGHT OF SNOW FOR SEMINOLE INDIANS

This is the first time that Indians have been out of Florida, first time they ever saw snow or a railroad. When they first saw the snow they thought that it was the wraith of the Great Spirit accompanying them for safety, but when they saw the slush in the streets yesterday they said something else again. For a while yesterday they were thought to be lost, and just as a general alarm was about to be turned in for them they were discovered asleep on a radiator.

The counties represented extend from that of Leon to Palm Beach and from Collier and Lee to Orange, which is about the center of the State. In charge of the Orange County exhibit is Karl Lehmann, Secretary of the County Chamber of Commerce. At the entrance to the exhibit are two papier mache oranges four feet in diameter, each filled with grape fruit, oranges and tangerines. Back of this is a miniature orange grove with a Florida home in the foreground.

Orlando is the county seat of Orange and has twenty natural lakes within its limits and there are 1,500 of these in the hills of Apopka in the county. Orlando has a summer population of 18,000 and double the number in the winter.

The Floridian groves are banked at the Fourth Avenue end of the Garden

## Florida in New York Offers Smiling Contrast to City's Snow and Slush



with the Sarasota County exhibit of fruits, palms and nuts, in charge of Edwin O. Burns of Sarasota City. He's in the real estate business there and represents the realty interests of John Ringling, the circus king, who

has banks and orchards and boats and farms in that part of the Flamingo State. Mr. Ringling's one estate contains 72,000 acres and you can ride forty miles going around it. He has a key also two and one-half miles

in diameter and is building a causeway from the island to the mainland.

Across the Sarasota exhibit extends this legend: "Spend a summer this winter in Sarasota, Fla." That sounds

Continued on Page 38

# The "New Deal" in Florida Banana Growing

By Charles L. Stokley, President Florida Banana Growers Association, Mt. Dora.

Yes, they grow bananas in Florida—have been growin' them from almost time immemorial—but that doesn't mean that there has been anything in the growing of bananas, so far as creating a banana industry is concerned. If you seek Florida banana-growing and marketing statistics from any source whatever, you will be told that there is "nothing doing." This was the state of affairs nearly 25 years ago when I first gave serious attention to bananas as a means of profitable production—it is the same today as far as an industry is concerned. Under the old conditions the only semblance of banana production observable anywhere in Florida were the small patches of native varieties, such as Hart's Choice, Ladyfinger, Horse Banana, etc., growing here and there all over the southern part of the state, the fruit being peddled around in nearby localities. As such, banana growing, after once being started, largely—if not altogether—takes care

of itself, or rather, it is generally left to take care of itself to produce, it is stretching the imagination to designate such production as an industry. Rather, it properly can be classed with the "tick" cattle and "razorback" hog industry, both in volume and in value, and possessing about the same industrial prospects. Notwithstanding the fact that the contribution to the profit side of Florida fruit production made by the native (above specified) banana production is practically "nil," such production is still maintained by some advocates of such varieties as entitling it to be called an industry. As with practically every product, in every field of endeavor, and above all in the banana growing and marketing game, the product itself—the factors involved in making the product desired and bought by the consuming public—is the dominating feature of the whole business. If the product is right, if it appeals to the buying public, it can be developed in-

to an industry, otherwise it cannot.

He who runs may read the condition existing in Florida bananas growing up to this time, which clearly shows that the bananas grown and marketed have not the factors, both in quantity and quality features of the fruit, making for success as a real business. If it were possible to turn them to successful account, why is it that during all these years such bananas have been grown in Florida there is nothing to show for it in the way of results? The fact is, with all the years this sort of banana growing has had the Florida producing and marketing field all to itself, no one—not even one especially looking for it—would be able to recognize the industry if he met it face to face. No wonder one cannot recognize it, for it doesn't exist. I preface the real purpose of this article, with the reference to what has been done in Florida in the past, and which is still being advocated by those having their interests in that direction. I do this in order to make it clear that the future of the banana industry in Florida lies along different—radically different—lines, than followed in the past. In other words, there has to be a "new deal" in banana growing and marketing conditions in order to make a new start.

Like in many other industries—in many other fields of production—this "new deal" will not only have a far-reaching effect upon banana growing itself, but will result in the banana industry taking its rightful place as one of the greatest and most successful of Florida's fruit interests. It is late in arriving, but it is better late than never, as would be unquestionably the case under the old ways of procedure.

This will be a "new deal" throughout; new in the variety of banana propagated and produced; new in the class of men coming into the industry; new in aims and ideals; new in accomplishments striven for; new in the quantity and quality of fruit; new in marketing conditions, etc.

There is no fruit shipped into this country—whatever its kind or from where it comes—upon which the people have been more definitely educated than the banana. People everywhere are educated to the distinctive



CHARLES L. STOKLEY

banana flavor of the fruit shipped to this country by the millions of bunches a year. They are completely and absolutely "sold" on this banana and to re-educate them to another banana flavor would require almost prohibitory expense and effort. And, by the way, it is pertinent to remark that the banana raised in Florida in the past, and even now as above specified, does not conform to the accepted and educated banana taste of the imported fruit. That fact alone would make it practically impossible to rear a banana industry upon the propagation of such bananas. On the other hand—and this is where the "new deal" sharply differs from the old one—this new banana is of thoroughbred parentage and lineage, bearing all the qualities and features, both from a producing and marketing standpoint, that make for a real success in growing bananas in Florida.

As the product itself is the very foundation upon which an industry can be erected, so in the "new deal" in banana growing in Florida, the foundation upon which a successful and expanding industry can safely be erected, is supplied by the

#### "IMPROVED CAVENDISH" BANANA

This thoroughbred banana, while of alien parentage, is naturalized, and has undergone 23 years of specialized education and training, and is now ready to prove by actual figures and performances that it is a real banana, having a real mission, with real ability to make money for growers. As probably many of the readers of The Citrus Industry are not familiar with banana conditions in Florida, or conversant with the superior merits of this new variety of banana, it may not be amiss to give a few details of its origin and development. If this account will serve no other purpose, it is the hope of the writer that it will serve to make clear that vast difference—covering every feature making for profitable production and successful marketing—existing between the old, or native varieties of bananas grown in Florida, and this new "Improved Cavendish." From now on, you will please understand "all bananas are not alike," and that there is something vastly more than "bananas are bananas."

As the writer happens to be the originator and, up to recently, the sole propagator of this "Improved Cavendish" variety of banana, the claims for this banana may seem to be tinged with self-esteem and self-praise, but such impression to make is far from my desire. As a matter of fact, the "Improved Cavendish" banana doesn't

have to be supported or boosted. Its merits are self-evident upon investigation. That these special merits are recognized and appreciated is evidenced by the rush that is now on to get into banana growing in Florida with this variety as propagating stock, which rush is rapidly assuming the proportions of a stampede, and is only prevented from becoming such right now by the limitation of genuine nursery stock. It is only during the past three years that "Improved Cavendish" plants have been available for plantation development even in limited quantities, and it will be considerable time yet before propagating stock will be available in sufficient quantities to enable the industry to be put upon a state-wide basis.

After several years observation, the writer became convinced that Florida climate and soil conditions were ideal for banana growing, but he was not convinced then, any more than now, that the ordinary Florida-grown banana offered sufficient profit possibilities to warrant undertaking to build up a successful business upon it, saying nothing of making it a foundation for an expanding industry. He, therefore, set methodically and patiently to evolve through scientific plant propagation a variety of banana that would come up to the standards set by the imported fruit which then, as now, dominates this country's banana markets.

After securing from a leading Florida nursery (Reasoner Bros., Oneco) in 1901, all the varieties classed as commercial, they could secure—consisting of five—the writer started on his long, patient, systematic effort to build up from some or all of these five varieties a plant with the desired qualities. It took only one season to show that but one of the five held out any sort of promise of coming up to expectation. This variety was known as the "Dwarf Cavendish," being imported from the American tropics. It is also grown in China, Honduras, Jamaica and the Canary Islands, and is the hardiest of all the imported stock and the only one adaptable to the Florida semi-tropical Climate. Discarding all but the Dwarf Cavendish, the writer followed accepted methods of plant improvement over a period of 23 years, with the result that he had the intense satisfaction of seeing his original small, shy bearing, light production "Dwarf Cavendish" develop into a great, big, heavy and sturdy plant—the bunches averaging way above the maximum size produced by the parent stock—as well as fruiting

in a shorter period and more dependably. It was not until he had seemingly been unable to bring the plant to further perfection, both in hardiness and fruitage, that the writer undertook to expand his own plantation, or consent to its use as foundation stock for other plantation development. This was, as above stated, three years ago, since which time many thousands of "Improved Cavendish" (so designated as a compliment to, and to differentiate it from, the Dwarf Cavendish) have been planted through South Florida, which are now serving to enrich those having the foresight and wisdom to wait until the opportune moment arrived to embark in the banana game on a serious scale. This "bred up," true to form banana stock is as well serving the foundation upon which is now being erected a real banana-growing industry in Florida.

In addition to possessing unequalled (by the parent stock or any other Florida-grown banana) features of plant size and sturdiness and rapid, healthy growth—along with consistent and persistent production of big bunches of deliciously flavored fruit, ranging from 50 up to 150 pounds, according to soil and cultural conditions—the "Improved Cavendish" is even hardier than the Dwarf Cavendish, its parent stock. This feature, along with its improved fruiting qualities, peculiarly fits the "Improved Cavendish" to serve as a safe and profitable foundation upon which to erect a profitable and dependable banana industry in Florida. No other variety of imported banana stock, so far known, has been found adaptable to the Florida climate, nor has there been found in Florida or elsewhere any variety, whatever its name or origin, that excels or even approaches the "Improved Cavendish's" ability to produce and sustain until maturity bunches of the size and weight specified herein.

In order to offset the advantage of the Improved Cavendish, bigger and heavier bunches produced consistently and persistently, many devotees of the old and inferior varieties of Florida bananas fall back upon the absurd claim that dealers prefer the smaller bunch fruit, etc. As bananas are universally sold by weight—therefore the heavier the bunch, the bigger the profit—such an argument falls flat with the Improved Cavendish grower, whose production, therefore profits, are automatically greater through his plant's inherently greater producing ability. Besides, the Improved Cavendish, as well as the imported va-

## THE CITRUS INDUSTRY

ties, have splendid keeping qualities during the ripening stage and thereafter. This feature insures the banana remaining on the stalk until sold, in striking contrast to the tendency of the common Florida banana to drop off the bunch when ripe and many times before being sold. A serious drawback from a dealer's standpoint.

After 23 years close observation of every factor involved in producing superior banana growth and fruitage—supplemented by nearly four years of actual experience in growing and marketing the "Improved Cavendish" banana—the writer is frank to say that, to his knowledge, this banana has not developed a single weak point, or drawback, covering every feature of growth, fruitage and marketing. It has proven, is proving, and cannot help but continue to prove ALL TO THE GOOD, both in the eating, in the selling, and in the collecting of the fat, profitable returns it steadily brings to its growers.

Recurring again to the statement made in the beginning of this article, now that a banana has been developed with growing and fruiting qualities on a par with the finest imported fruit, it can be logically and safely claimed that the way is now clear to go ahead with confidence in establishing a growing—not a standstill as formerly—banana industry in Florida.

In nearly all its features of growth, production and reproduction, banana culture reads almost like an Arabian Nights story, as compared with other Florida production and profitableness. In quickness of growth and production of fruit, in its tremendous and continuous reproducing properties, in the economy and ease of gathering and marketing the banana, in its continuous through-the-year fruiting, its freedom from diseases and insect pests, in its economical production—the banana stands alone in Florida fruit production.

The "bred up" Improved Cavendish during its growth from nursery plant to maturity, varying from nine months to a year according to soil and cultural conditions, will send up from 4 to 10 or more new plants, which, in turn, will mature and bear fruit in an average of nine months, thereby insuring a plantation bearing indefinitely and at a continuously expanding rate. As will doubtless be noted in reading this article, there is no similarity, or conflict, between banana growing and citrus culture in Florida either in soil conditions or any feature of production and marketing.

Each have their own distinctive and advantageous features, with the result that they can progress side by side, with no motive for conflict or antagonism, in upbuilding the state's fruit resources and adding to the state's prestige as a great producing section of exclusive fruit.

Unlike citrus, the banana thrives in a variety of soils and throughout all central South Florida, thereby making banana growing profitable throughout practically the entire state—the extreme north and northwest alone excepted by reason of the winters being too cold for bananas. However, in common with many other fruits, the banana has its soil preferences, and it is generally profitable to have these preferences in mind when undertaking banana culture on a serious scale. It is the experience of the writer, confirmed by wide observation, that a rich, heavy, black sandy loam assures best results in banana culture, particularly when such soils are well drained and supplied with continuous moisture throughout the year. The banana is always a voracious feeder and a heavy drinker, therefore the richer the soil is in the way of natural plant food, along with the artificially supplied, and the more abundant and equable the moisture conditions, the more rapid the plant growth and the more abundant the fruit yield. The banana gives its best and quickest returns when it is allowed, or made, to step right along in growth. The livelier the stepping the better; therefore, rich natural soil conditions, reinforced by liberal applications of stable manure, if available, together with plenty of humus-making material of organic commercial fertilizer, will bring forth many fold in returns.

Productive muck lands, of which Florida is blessed with untold thousands of acres, when well drained and supplied with adequate moisture, natural or artificial, should yield magnificent returns with bananas. Generally speaking, any land adapted for raising vegetables profitably will serve for the profitable culture of bananas. While the banana will grow on citrus soil, such soil is not recommended for profitable banana growing.

It will be noted, therefore, this wide range of suitable soil conditions for banana growing makes available literally millions of acres throughout Florida adapted to this industry, and which otherwise would largely be a waste. Even with but a small fraction of such available land put into banana cultivation, the state's fruit production will be augmented by

many millions of dollars annually. This prospect is not only feasible, but entirely probable in the very near future. With the acreage already set out to the "Improved Cavendish" banana, and the increasingly greater acreage planned and in contemplation, the only limitation to the immense and immediate expansion of Improved Cavendish acreage is the inability to produce propagating stock in sufficient quantities to meet requirements. This limitation is being rapidly overcome, making it only a question of time before the state as a whole will begin to sit up and take notice of the stampede into the banana-growing industry.

While banana returns are largely governed, as above stated, by soil and cultural conditions, yet on one of the preferred soils above mentioned, an acre of Improved Cavendish bananas, set 8x8 feet apart, making 680 hills or stools to the acre, may be expected to yield from the first setting approximately 25,000 pounds of marketable fruit. The first fruiting period is usually 15 months, it requiring about that time to bring the young plants to maturity when detached from the parent plant and transplanted. The next production period is shorter than the first, owing to the bearing plants being sustained and nourished by the parent plant. This period is reduced to 9 months and even less under unusually favorable growing conditions, and the yield may be expected to approximate 100,000 pounds of marketable fruit. Maximum bearing results are reached by the third year, when an approximate yield of 125,000 lbs. may be expected, with this production indefinitely continued.

For the past year or so the wholesale price of bananas to retailers has been 6 cents and more per pound, plus transportation, so it can be readily seen that when one gets to going strong in the banana game, he won't have to lay awake nights figuring out how to demonstrate an automobile or other necessities.

Not the least of the good points of banana growing is that the plant is entirely free from blight and plant pests, at the same time standing abuse better and thriving under conditions that would cause other fruit to fall. About the only cloud on the banana sky is its susceptibility to cold and frost. However, a large proportion of the central and southern parts of the state are practically free from temperatures injurious to either the plant or the fruit. They can be, however,

## THE CITRUS INDUSTRY

Nineteen

safeguarded against in all sections by use of grove heaters, to the successful operation of which the heavy banana foliage is of great assistance. Frost and cold insurance is also available at reasonable rates. The juicy margin of profit in banana cul-

ture makes the cost of such protection of small moment. However, the banana stands up successfully under a temperature of 29 degrees, and if held in a semi-dormant condition—which is the banana's usual state during the colder periods—it will stand even less

ley Associated Nurseries, Inc., Winter Haven, Fla.

### TOBACCO EXTRACT SPRAYS CONTROL SUCKING INSECTS

Strong tobacco extracts are recommended to keep in check the melon aphis—a sucking insect. This insect, often called the "Hessian fly," is a serious and destructive pest of watermelon, cucumbers and cantaloupes. Where spraying is done with tobacco extracts the injury is usually so light that the saving more than pays for many sprayings.

A nicotine sulphate solution for this purpose should be prepared as follows: Dissolve 2 or 3 pounds of whale-oil or other caustic soap in 5 gallons of water. If the water is hard, use more soap. (The purpose of the soap is to make the spray spread better.) Add  $\frac{1}{2}$  pint of the nicotine sulphate solution. When thoroughly mixed, dilute with water to 50 gallons.

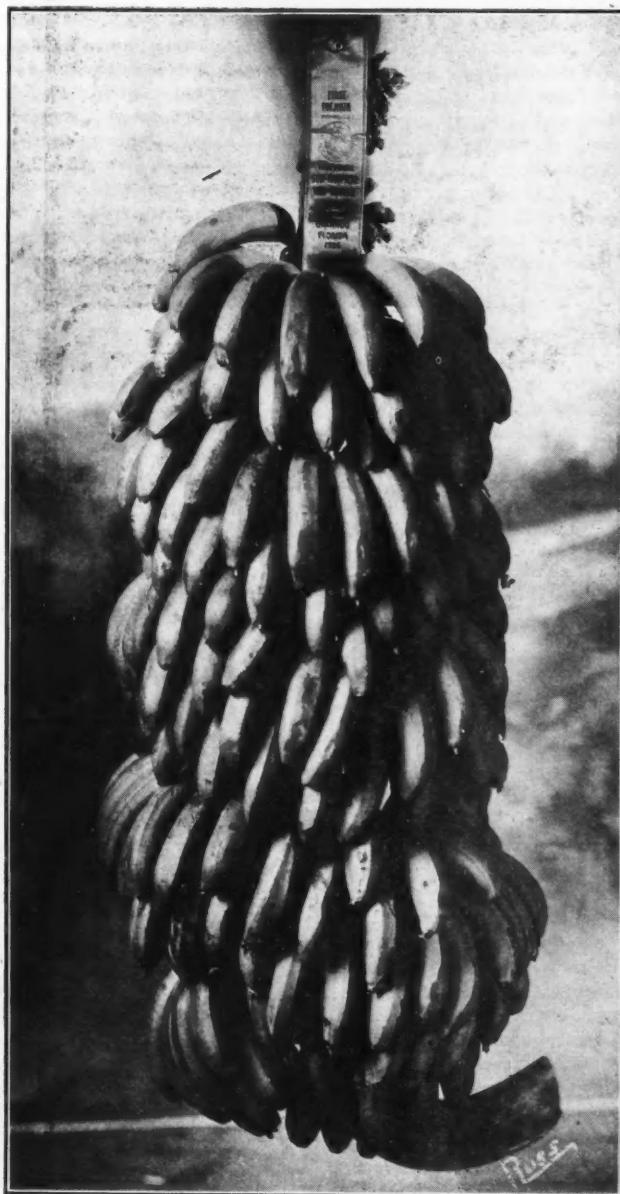
In applying the spray use a nozzle of the Vermorel type with an elbow, and be sure to spray the under side of the leaves, because it is there that the aphids are located. For this reason, adding tobacco extracts to Bordeaux mixture when spraying for anthracnose will not ordinarily give satisfactory results in controlling aphids, according to J. R. Springer, of the Florida College of Agriculture.

Fine tobacco dust placed about the young plants when wet with dew will kill many aphids. If the aphids have a good start, however, dusting is much less effective than spraying.

### DEMAND ONLY QUALITY CANNED FRUITS

Sales of high grade canned fruit were good in Austria last year, says Assistant Trade Commissioner Prentiss M. Terry in a report to the Department of Commerce. The Austrian fruit preserving industry was unusually active, particularly in the manufacture of high class jams, and a brisk demand for fine bottled goods among hotels and private consumers. Jams of only medium quality find a difficult market and many Austrian factories engaged in the large scale manufacture of jams are still suffering from the general aversion which prevailed against them at the close of the war because of the very poor quality produced at that time. These large manufacturers complain of the lack of business.

In writing to advertisers, please mention The Citrus Industry.



Florida Leads. Stokley Improved Variety of Banana, Weight 136 Pounds, Net to Grower \$8.16. Grown in 20 Months From Planting.

ser temperature successfully. Should the plant be frozen down in the stalk, another plant will come right up in its place and produce fruit in a few months. So you see, even a dreaded "freeze" is not able to put the banana out of business.

If any reader of The Citrus Indus-

try will be further interested in banana culture under the "new deal" conditions now under way in Florida, additional information and literature going more fully into the propagation and culture of the "Improved Cavendish" may be had by addressing the writer, C. L. Stokley, President Stok-

# Annual Meeting Satsumaland Fruit Growers

The Second Annual Meeting of the SATSUMALAND FRUIT GROWERS, the co-operative fruit growing organization of the section of Florida lying between the Choctawhatchee and Apalachicola Rivers, was held at the School House in Round Lake Feb. 12. As this was the first meeting of the members of the association since the January freeze, it was well attended and after hearing from the experts who were present, the meeting became almost wildly enthusiastic.

Dr. A. J. Mitchell, of Jacksonville, Meteorologist in charge of the Government Weather Bureau work in Florida, was present and gave an intensely interesting talk. He illustrated his talk with charts showing the extent and severity of the principal cold spells experienced by Florida since the Weather Office was established in Jacksonville. These records demonstrated the fact that the temperature experienced on the fifth of January, this year, was the lowest January temperature on record since the office was established. The records and charts, also, demonstrated that other parts of Florida, while not suffering as much this time, have at other times had lower temperatures than were experienced in SATSUMALAND. While Dr. Mitchell made many interesting points which were favorable to the growing of Satsuma oranges in SATSUMALAND, his strongest point was the statement that as far as cold spells are concerned the growing of Satsuma oranges in this section was a safer horticultural venture than the growing of round oranges and grape fruit in the greater portion of South Florida.

Mr. H. G. Clayton, of Gainesville, District Agent in charge of Agricultural and Horticultural Extension Work in north Florida, told the members of the association that while it had not been possible for him to examine all the groves, he had seen enough to convince him of the fact that the only serious damage done by the recent freeze was to under-nourished and unhealthy trees. He told the members that where the trees were vigorous, clean and healthy they would probably lose very little wood. The loss probably being limited to the last growth of the 1923 growing season. He stated that

in some ways the freeze will prove to have been a benefit as it will serve as a splendid demonstration of the fact that the trees must be kept healthy and clean.

The statements of these two men, who are in position to know what they are talking about, confirmed the opinions held by most of the growers, and plans were made at the meeting to plant acreages next winter which will be limited only by the number of trees the nurseries are able to supply.

In the reports of the Officers two things were emphasized strongly. First, that we had a "horrible example" in south Florida now in the growers of citrus fruit not working as a unit. The Satsuma growers were organized before they got into bad habits, and the plea was made for the continuance of a 100 per cent. membership for the obeying of all rules laid down by the association and for the honest endeavor on the part of each member to co-operate with the others to the fullest extent. Second, the advisability of shipping none but the very highest quality, first. It was pointed out that the result of the recent freeze will bring about the planting of Satsuma oranges over a very wide area and that in order to lead SATSUMALAND must continue to maintain its reputation for the high quality of fruit that this section is known to produce.

At the close of the morning session about forty new members applied for membership and were elected, which makes a total of a little over two hundred members, including all those who are growing Satsuma oranges commercially in the section covered by the association.

The afternoon session of the meeting was given up to the discussion of fertilizer and railroad rate problems. Committees were appointed, one to advise the proper mixture and purchase fertilizer for the members; one to take up the question of freight and express rates with the rate making authorities; and one to arrange for the packing and marketing of this year's crop of deciduous fruits.

The old Board of Directors was re-elected with the following additions: Mr. Byrd Farmer, 17 Mile

Pond, Mr. S. A. Gainor, Cottontdale, Dr. Ford, Compass Lake, and Mr. D. R. McBride, Youngstown. The officers elected for the year are William L. Wilson, of Panama City, President; J. D. Smith, of Marianna, Vice President, and W. A. Sessoms, of Bonifay, Secretary.

## SPRAY OF BORDEAUX & OIL REMEDY FOR SCAB: EXPERT

The remedy for scab-infested citrus is sprayings of Bordeaux-oil. These should be applied, first, just before the first flush of growth, second, about the middle of the blooming period, and third, two weeks after the second application.

This remedy is recommended by E. F. DeBusk, citrus pathologist of the Florida College of Agriculture, and repeated experiments and tests have proved it to be effective, provided it is applied properly and at the right time. The 3-3-50 Bordeaux should be used. To it add 1 per cent of some good oil emulsion in order to aid in keeping down insect pests on the citrus trees at the same time. (For the second spraying add only  $\frac{1}{2}$  per cent of oil).

The fungus which causes scab attacks only very young and tender tissues, and even then a liberal supply of moisture is necessary before infection can actually take place. Leaves and shoots may become affected from the time the growth puts out until perhaps three or four weeks later, and fruit is probably subject to infection for a month or six weeks after the blossoms drop.

In groves where citrus scab is only moderately serious, the first two applications should give satisfactory control. In groves where scab infections are very light, one application of the Bordeaux-oil, from seven to ten days after from a third to a half of the petals are off, should give very good commercial control of the disease. This application would also control melanose.

He who deliberately burns the woods year after year is not only injuring himself, but he is burning his children and grandchildren out of the lumber business, the grazing business, and the farming business.

# Progress in Satsumaland



A 13 year old Satsuma Orange tree. About 10 ft. high and 15 ft. broad. A magnifier will show that the tree is literally loaded with fruit. In fact it bore \$75.00 worth of oranges this year. There are 2 acres of this age trees in this grove and the man has about 10 acres in 5 year old trees, and 14 acres all told. Last year he was offered \$2,000, an acre for his trees and refused it. Later he sold the fruit for more than that. I was there a few days ago and heard him refuse fifty thousand dollars for the 14 acres.

later sold the fruit off the two acres for more than \$2,000 per acre and had the trees and land left. The 1922 crop went around \$3,000 per acre from the old trees and when we were there there were plenty of trees carrying \$60 and \$75 worth of fruit per tree.

All of which goes to show why Satsumaland has such fine prospects and such staunch boosters, for this development is on the sand hill section, the poorest soil we have, and when the groves now being planted on the better clay lands and with clay subsoil, which produce better and finer flavored fruit, it is hard to predict the future of this section of Florida. But certain it is that there is already a great change for the better and great improvement is being made in every

Chipley, Fla., Feb. 11, 1924.

Mr. S. L. Frisbie,  
Editor Citrus Industry,  
Tampa, Florida.

Dear Mr. Frisbie:

I am herewith enclosing two photos, one of the Carroll Satsuma grove at Round Lake. This grove is the one that created such widespread interest when in fruit last fall. When we were there one Sunday at about 2 o'clock, there had already 400 people visited the grove that day, and safe to say more followed after that than had been earlier.

Mr. Carroll has two acres of 12-year-old Satsumas and I judge about ten acres of five-year-old trees, all loaded to breaking with ripening fruit, and when there we heard him refuse \$50,000.00 for his place, of 14 acres all told. Last year (1922) he was offered \$2,000 per acre for it and refused, and

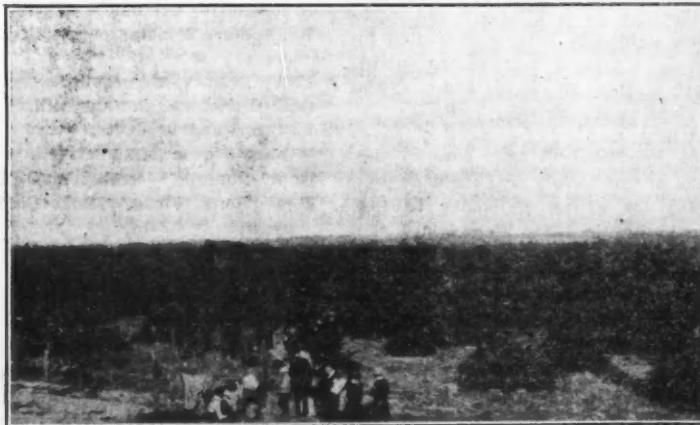


Trifoliota orange stock budded to Satsumas. C. E. Pigs Plant Co's. Nurseries, Chipley, Fla. In the heart of Satsumaland.

line of agriculture, especially in horticultural development.

We have for many years been testing out the bunch grapes in this section and have arrived at some very satisfactory conclusions, although we realize we have only made a beginning, and now have some 50 varieties that we hope to see fruiting this season.

We have one vine, a Black Spanish, now five years old that ripened over 1,500 bunches of grapes last season. It had over 300 bunches on a fence in 1922, and being crowded for room we allowed it to climb some small scrub white oaks to supply the birds. Last season we estimated the bunches at 500, then as we gathered some raised



Birds eye view of the Carroll grove of Satsumas at Round Lake, Florida.

Continued on page 30

# Horticultural Society to Meet in Tampa in April

The Thirty Seventh Annual Meeting of the Florida State Horticultural Society is to be held in Tampa from April 22 to 25 inclusive. The sessions are to be held in the Casino of the Tampa Bay Hotel, and the headquarters are to be at the Hillsboro Hotel. These matters were decided by the Executive Committee of the Society at its recent meeting in Tampa.

The week of April 20 to 26 is to be observed throughout the country as National Garden Week. Its purpose is to encourage the making of flower gardens, the conservation of natural beauty and the beautification of the community. This work is sponsored by the National Garden Association and a number of cooperating societies. The Horticultural Society is taking advantage of this occasion to encourage greater interest in the planting of flowers and the beautification of the homes and highways in Florida and is inviting Mr. Leonard Barron, editor of the Garden Magazine and president of the National Garden Association to make an address sometime during the meetings.

The citrus program for this meeting promises to be the most interesting and extensive in years. Fruit quality and production costs will be completely discussed. Citrus stocks and fruit maturity will have their inning. The ever present diseases and pests will receive their share of attention. Other citrus subjects that will be discussed will be citrus products; the relationship between the packing house and the grove; and the Satsuma orange industry. The citrus grower will find points of vital interest to him in this program and will do well to attend.

New crops and products will receive attention. The commercial planting of Tung Oil trees, from which the tung oil used in the making of high grade varnishes is obtained, are being made at points in the state and look very promising. The need of diversification of crops in Florida is most evident and encouragement is to be given by the Society to all that show promise.

Following the freeze in 1895, the growing of vegetables in Florida as an industry was born and has since

grown to be one of Florida's most important industries bringing millions of dollars into the state each year. The growing of Avocados has in recent years become an important industry on the lower East Coast. Owing to the low prices received recently for citrus fruits, much interest has arisen in the central portion of the state in the growing of this fruit. Small plantings have been made on the high lands as far north as Lake County that look very promising. The growing of this crop in the more favorable locations in the ridge section will be thoroughly discussed at this meeting.

The small fruits such as blueberries and blackberries will be given consideration. These fruits are being planted at different points in the state and should be planted more extensively as they are well adapted for growth here. The growing of blueberries is an important industry in parts of New England where they are grown on the waste lands adjacent to the cranberry bogs. The industry has reached a high state of development through the selection and hybridization of the plants. The opinion has been expressed that by proceeding along similar lines, blueberry culture can be made an important industry in Florida.

Other crops that will be considered are grapes, bananas, mangoes and papayas. A discussion of the growing of palms, roses, gladioli and other native and exotic ornamentals for home and highway beautification will be included in the program. Several authorities on architecture and landscape gardening have been invited to discuss a type of architecture particularly adapted to Florida and of types of planting that should go with it.

A large number of committees have been appointed to take care of the work of the Society that includes provision for giving assistance to the University, the State Plant Board, the Government Laboratories at Orlando, the Foreign Seed and Plant Introduction Gardens at Miami and other organizations that are working for the upbuilding and protection of Florida Horticulture. Many of these Committees will make their reports at the Annual Meeting only by title, the full reports being published in the pub-

lished Proceedings. The Committees as appointed by President Skinner are as follows:

Standing Committees 37th Annual Meeting Florida State Horticultural Society, Tampa, April 22 to 25, 1924.

#### Citrus Stocks:

R. E. Skinner, Tampa  
T. Ralph Robinson, Washington, D. C.

F. M. O'Byrne, Gainesville  
Reduction Box Cost in Citrus Production:

M. J. Daetwyler, Orlando  
L. C. Edwards, Thonotosassa  
S. F. Poole, Lake Alfred  
Wm. Edwards, Zellwood

#### Maturity in Citrus Fruits

W. J. Krome, Homestead  
J. O. Clarke, Custom House, Savannah, Ga.

#### Citrus Diseases:

T. J. Harris, Winter Haven  
J. G. Grossenbacher, Apopka  
H. E. Stevens, Ft. Myers

#### Citrus Pests:

J. R. Watson, Gainesville  
George E. Leonard, Louisville, Ky.  
Ralph P. Thompson, Winter Haven  
Relationship Packing House and Grove:

C. T. Patillo, Oak Hill  
Harold Crews, Care Citrus Exchange, Tampa

Wm. Howes, Haines City

Citrus products:  
M. R. Daughters, Haines City  
Mrs. Virginia Wakefield, Geneva  
Importance and Improvement Quality in Citrus Fruits:

R. E. Lenfest, Winter Park  
Clinton Bolick, Ft. Myers  
Bruce Floyd, Orlando  
Robt. Bier, Washington, D. C.

#### Satsumas:

E. F. DeBusk, Gainesville  
Geo. Huelsbeck, Cottage Hill

New Crops and Products:  
Wilmon Newell, Gainesville  
G. A. Russell, Washington, D. C.  
P. H. Rolfs, Vicos, Minas Garaes, Brazil

David Fairchild, Cocoanut Grove  
Pecans:

G. H. Blackmon, Gainesville  
SMALL FRUITS

Blueberries:  
Carl James, Montgomery, Alabama  
Frederick Coville, Washington, D. C.  
Blackberries:

# Spanish Grapes are Prohibited Entry on Account of Fruit Fly Infestation

Secretary of Agriculture Wallace, as a necessary measure of protection to the fruit and vegetable crops of the United States, has authorized the prohibition of the further entry of Malaga (Almeria) grapes from Spain on account of the recent finding that these grapes are subject to infestation by the Mediterranean fruit fly (*Ceratitis capitata*). This decision was reached following a formal conference with importers and others interested, conducted by the Federal Horticultural Board at the Department of Agriculture January 4, 1924.

To provide for such prohibition and for any like control as to other countries or districts which may later be necessary with respect to imports of grapes, the rules and regulations supplemental to Notice of Quarantine 56, governing the importation of fruits and vegetables into the United States, have been further amended, effective January 18, 1924, to provide that grapes of the European or *Vinifera* type may be imported only upon the presentation of evidence satisfactory to the United States Department of Agriculture that such grapes are not attacked in the country of origin by injurious insects, including fruit flies.

The determination that this grape is subject in Spain to infestation by the Mediterranean fruit fly was made in the latter part of November, 1923, and this determination was later fully confirmed by the rearing of adult flies in numbers from maggots taken from imported grapes.

#### The Malaga Grape—Status Re Fruit Fly and Imports

The variety of grapes involved in this embargo is the hard, green grape, imported from the province of Almeria, Spain, but which is commonly known as the "Malaga" grape. It is Spain's principal fresh fruit export to the United States and has been coming to this country for many years to the extent of several hundred thousand barrels (or more properly large kegs) yearly. The exporting season is a short one—practically all of the crop reaching this and other markets during the month of November and the first two weeks of December.

No suspicion has hitherto been entertained that this grape is subject to attack by the Mediterranean fruit fly, and there seems to be no previous record of such infestation. In fact, the record as to grapes in general indicates that this class of fruits is rather immune to attack by this pest, and this seems to be true even in Hawaii where it is perhaps as abundant as anywhere in the world and probably seriously infests a larger variety of fruits. This general record of immunity seemed to warrant the provision made under Quarantine 56 for the unlimited entry of this fruit. Nevertheless, inspection of this, as of all other fruits and vegetables, was provided for under this quarantine, and it is as a result of such inspection that the infestation referred to was determined.

The Almeria grapes intended for export to the United States this year totalled some 350,000 barrels, a portion of which had already been entered prior to the effective date (November 1, 1923) of Quarantine 56, and fully two-thirds of the total importation for the year had been entered and distributed prior to the discovery of infestation.

#### Preliminary Action Taken on Discovery of Infestation

Promptly upon the discovery of infestation, all shipments awaiting entry were held for determination of the proper course to be taken to safeguard the situation, and for such purpose the importers and handlers of these grapes were called in emergency conference November 27. It was learned at this conference that the imports would be over in two or three weeks and that probably most of the remaining shipments were already en route. As an immediate measure of protection, it was determined to exclude all "lines" of grapes in which as a result of inspection infestation was found, and to permit the entry only of "lines" which seemed to be free from attack. The term "line" designates grapes originating in a particular vineyard and, therefore, the finding of infestation in any of the barrels examined with respect to a particular "line" indicated that that

particular vineyard at least had been invaded by the pest. Conversely, the failure to find infestation in any "line" was some, but by no means conclusive, indication that the vineyard in question might not have been invaded. Importers and others in interest further agreed not to ship any excluded "lines" to Cuba or other West Indian Islands, inasmuch as the risk of establishment of the pest in the West Indian region from such shipments would be even greater than in the United States.

To aid in the inspection of grapes awaiting entry, and others en route, the force of inspectors at New York was increased to ten. Out of the 6,222 "lines" of grapes, involving a total of 198,425 barrels, which were offered for entry subsequent to the conference of November 27, on the basis of the examination of approximately one keg in fifteen, some 13,000 kegs were opened and examined. This examination resulted in finding infestation in 129 "lines," representing some 4,337 barrels of grapes, all of which were refused entry.

#### Facts Reported and Formal Conference Called

Following the emergency conference of November 27, a statement was drawn up and distributed under date of December 7, 1923, reporting fully on the finding of the infestation of these grapes and suggesting, particularly for southern districts, certain protective measures, more particularly with relation to the burning or disinfection of the ground cork in which these grapes are packed and which might possibly contain escaped maggots in various stages of transformation. This statement also announced a formal conference (held January 4th) to determine future policy with respect to the entry of these grapes.

At the conference of January 4, the Spanish Embassy, The Merchants Association of New York, and the leading interests concerned in the importation and distribution of these grapes were represented, together with experts from the Department of Agriculture and official representa-

# Maintaining Citrus

HOW THOSE WHO PUT THEIR OWN GO  
CHASES WORK TO HOLD P

## The Back

Recently much has been said and written concerning marketing the Florida citrus crop. The part played by those marketers who are a

It is these cash buyers who have always absorbed a majority of the Florida citrus crop. Whatever the cash buyers have had of prosperity at times, THE GROWERS ALWAYS HAVE HAD THEIR SHARE. When there have been losses, THE CASH BUYERS INVARIABLY HAVE TAKEN MORE THAN THEIR SHARE.

When a grower has sold his crop to a responsible buyer, the grower has had a definite knowledge of what his crop meant to him in DOLLARS AND CENTS, without having complicated the risks of growing by adding to them THE RISKS OF SELLING IN THE MARKETS.

Just at this time we believe these things by thinking growers and those who have at heart.

Milne-O'Berry Packing Company.  
St. Petersburg.

Jeffords & Smoyer,  
Clearwater

E. W. Wiggins,  
Plant City.

The Lakeland Citrus Co.,  
Lakeland.

The Umatilla Fruit Company,  
Umatilla.

The Eustis Packing Company,  
Eustis.

S. J. Sligh & Co.,  
Orlando.

Fugazzi Bros. Co.,  
Clearwater.

Gentile Bros. Co.,  
Orlando.

West Coast Fruit Co.,  
Clearwater.

R. W. Burch, Plant

# Citrus Prices==

WN GOOD MONEY INTO CROP PUR-  
OLD PRICE LEVELS STEADY

## ckbone of An Industry

citrus crop. Apparently little attention has been given, however, to the important  
who are accustomed to purchase crops outright.

The growers MUST sell their fruit in order to realize on their labors. Those  
growers generally HAVE PROSPERED MOST who have obtained a good  
price for their fruit AT FIRST HAND, and left to those who make such work  
their business, THE HAZARDS OF SHIPPING AND DISTRIBUTING.

In times of stress it has been the CASH BUYERS WHO HAVE USUALLY  
CONSTITUTED THE BACKBONE OF THE CITRUS INDUSTRY IN  
FLORIDA. They cannot afford to cut and slash prices for the very good rea-  
son that they have their own, good hard cash invested in the fruit they are  
selling. Also practically every one of these cash buyers have groves of their  
own and they thus ALWAYS STAND FIRMLY FOR MAINTAINING A  
STEADY LEVEL OF PRICES.

these things are worthy of consideration  
e who have the welfare of the industry

Walker Bros. Co.,  
Orlando.

Roberts Bros.,  
Zolfo.

Chester O. Fosgate Co.,  
Orlando.

Ridge Fruit Co.,  
Frostproof.

Richardson & Marsh Corp.,  
Orlando.

Plant City.

John S. Taylor,  
Largo.

Alexander & Baird,  
Beresford.

H. G. Montgomery & Son,  
Tampa.

Clearwater Citrus Fruit Co.,  
Clearwater.

Dillard & Keene Company,  
Eustis.

**SPANISH GRAPES PROHIBITED  
ENTRY ON ACCOUNT OF  
FRUIT FLY INFESTATION**

Continued from page 23

tives—plant quarantine guardians and others—from some nine states, and the whole subject was fully considered. The mercantile and importing interests, while urging commercial and other reasons for a continuation of the importation of these grapes and offering for consideration suggestions as to possible means of safeguarding their entry, indicated their full realization that all risks which could not be adequately safeguarded should be given full weight in reaching the decision as to whether these grapes should be admitted or excluded, and expressed emphatically their opinion that the fruit and vegetable interests of the United States should come first and have the benefit of any doubt. They stated, however, that it was important that the decision should be rendered early, i. e., before the period for contracting for the next year's crop. The general status of infestation brought out at this conference forms the basis for the decision herein announced, and is embodied in this statement.

**Amount and Nature of Infestation**

It should be noted that the infestation of these grapes has been very slight from the standpoint of the consumer, so slight, in fact, that the original determination of it might not have been made except for the unusual expertise and skill of the Department's inspectors. For the most part, the grapes showed no exterior sign of attack—in fact, as a rule the infested berries were superior in appearance and would normally be eaten without suspicion by anyone. While as a rule only single berries were found infested, in one instance 29 larvae were taken from a single bunch of grapes. The amount of infestation is perhaps roughly indicated by the records of finding of upward of 200 larvae in the barrels examined of the 129 rejected "lines." It is to be noted, however, that this finding was based, as already indicated, on the examination of approximately one barrel in 15 and on a critical examination of less, on an average, than one-tenth of the grapes contained in each barrel inspected. It is reasonable to infer that the percentage of infestation would have been fairly constant throughout the rejected "lines," and, therefore, if all of the barrels included in such "lines" had been inspected we would have to multiply these findings by 15 and 10, which would indicate a pos-

**THE CITRUS INDUSTRY**

sible content in such rejected "lines" of some 29,000 larvae!

The infested "lines" were distributed as to origin throughout the province of Almeria, indicating a rather general occurrence of the fruit fly in that province. It is reasonable to infer, therefore, that the risk of entry of fruit flies adhered more or less generally to all of the imports of these grapes, whether or not infestation was actually determined.

**Nature of Risk to the Fruit and Vegetable Crops of the United States**

While it may be admitted that the risk from these grapes is in one sense minimized by their distribution throughout the United States and their fairly prompt consumption, probably unwittingly, larvae and all, the actual numbers of fruit fly maggots which may thus be imported, as indicated, must necessarily involve the emergence of many from the grapes and their transformation in the ground cork employed as packing, or in the crevices of the barrels, or otherwise on premises where such grapes are stored and handled. That there is nothing in the temperature conditions to which these maggots or later stages would ordinarily be subjected in this country which would prevent their successfully passing the winter and emerging as adult flies to attack the many fruits and vegetables which are hosts of this pest has been abundantly determined by experimental work conducted by this department and by other agencies. The establishment of this pest might, therefore, occur anywhere in the United States and undoubtedly it could maintain itself in very important fruit sections, probably extending well north into areas devoted to cultures of deciduous fruits.

Another phase of the matter is the possibility that the failure to note infestation of these grapes during the long period of years which they have been an important article of import may well indicate that the infestation in the Almeria district of Spain is of recent origin and that, therefore, the risk as to future importations may become even greater than that indicated in this year's imports.

The enormous value of the investment in fruit and vegetable production in the United States, which has no counterpart in the world, makes it imperative that this risk, now for the first time determined as a very real one, should not be further assumed.

It is realized with much regret that this embargo will stop the import into the United States of an important product from Spain and will eliminate

from domestic use in this country a winter fruit which has always had an appeal and found ready sale.

**The Fruit Fly Menace**

Fruit flies are looked upon as perhaps the worst of all known fruit pests and in many foreign countries they are now occasioning enormous losses to fruit and vegetable crops. Fortunately the United States has so far kept free from these pests. Of these the most widespread and destructive undoubtedly is the so-called Mediterranean fruit fly, a pest which may have originated in West Africa. The entry and establishment in the United States of this fruit fly would be nothing less than an overwhelming disaster, particularly to the fruit interests of this country. The possibility of maggoty oranges, grapefruit, peaches, prunes, etc., would practically destroy the confidence of the public in these fruits, fresh or preserved, and even a small percentage of infestation would have its psychological effect on the salability and popularity of these products. Furthermore, the nature of the infestation, as already indicated, in the instance of these Spanish grapes is such that it is not possible to eliminate all infested fruit by inspection and selection, nor is there any known practicable method of disinfecting infested fruit in such manner as to fully safeguard its entry. Protected as they are in seemingly sound fruit, it is not possible to reach and destroy fruit fly maggots by any known means of poisoning or disinfection. For these reasons the prohibition of entry of any fruit or vegetable known to be more or less generally attacked in the country and district of origin is believed to be the only means of adequately eliminating the risk.

The realization of the danger to the American fruit and vegetable crops from various foreign fruit flies was the particular basis of the general fruit and vegetable quarantine which became effective November 1, 1923. Under this quarantine certain classes of fruits and vegetables known to convey a distinct risk of being a means of bringing dangerous fruit flies and other pests to this country are definitely excluded. All other fruits and vegetables are brought under regulation and entry under permit for the purpose of inspection as a condition of entry, to determine any risk or danger which may not now be known or which may later develop.

In writing to advertisers, please mention **The Citrus Industry**.

## SPRAY NOZZLES EVER CLOG?

Possibly foreign matter in the copper sulphate, as bits of wood or other impurities cause the trouble. This will not happen if you use

### Nichols Triangle Brand Copper Sulphate

(Blue Vitriol)

It is pure, clean and packed in specially made barrels and kegs.

For Years the Standard

Large Crystals—Small Crystals—  
Pulverized

### Nichols Copper Co.

25 Broad St.



New York

## JOHN B. BEACH AVOCADO TREES ARE RELIABLE

Avocado culture looms on the horizon as an industry of vital importance. Why? Because avocados will give greater profits than citrus and require less care.

However, because of the newness of avocado culture, extreme care is necessary in selecting trees.

John B. Beach avocado trees, guaranteed to be free from avocado scab, are as near perfect as any trees can be and will bear the highest quality fruit with maximum production.

Why will these trees do this? Because they are John B. Beach avocado trees, grown exclusively by him and sold everywhere thru the

### QUALITY NURSERIES

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Lakeland, Fla.

Don't Wait!

Order

## GULF BRANDS

Your trees must be well fed to make the next crop pay. A starved grove can't grow profit-making fruit.

Application of the right fertilizer now doubles your prospects for profits next season.

MAKE SURE.

ORDER GULF BRANDS NOW

### GULF FERTILIZER COMPANY

Citizens Bank Building  
Tampa, Florida

So throw away the pick and the grub hoe,  
There's no more work for poor old Ned,  
For—



The Webb Clearing Plow has taken his place.

By the use of this machine, a tractor and two men, from four to eight acres of Saw Palmetto land can be grubbed and left ready for piling and burning in a day's time.

The cost price is the only expense—there are no parts about it to break or get out of order.

### Harllee & Harrison

Lincoln, Ford & Fordson Dealers  
PALMETTO, BRADENTOWN AND  
SARASOTA, FLORIDA

## Twenty-eight

### HORTICULTURAL SOCIETY TO MEET IN TAMPA IN APRIL

Continued from page 22

T. A. Quinn, St. Petersburg  
R. T. Nichols, Winter Haven

#### Grapes:

E. L. Lord, Gainesville  
E. E. Truskett, Mt. Dora  
Baron H. Von Lutichau, Earlton

#### SUBTROPICAL FRUITS

#### Avocados:

John Morley, Lake Alfred  
H. O. Sebring, Sebring  
Jno. V. Oberholtzer, Esmeralda

#### Bananas:

Ed. V. Ayres, Gainesville  
E. N. Reasoner, Oneco  
Dr. O. F. Burger, Gainesville

#### Mangoes:

John W. Barney, Palma Sola  
Papayas:

James Hendry, Ft. Myers

#### ORNAMENTALS

#### Palms:

Chas. T. Simpson, Little River  
Roses:

Mrs. A. Mendenhall, Tampa

#### Native and Exotic Ornamental Plants:

Mrs. Marion A. McDowell, Punta Gorda

#### Gladioli:

W. H. Knull, Tampa  
Theo. L. Meade, Oviedo  
C. K. Godbey, Waldo

#### Florida Architecture and Landscape Gardening:

W. D. Sturrock, West Palm Beach  
Addison Minzner, Palm Beach

#### Garden Clubs:

C. Leslie Whipp, Jacksonville  
Miss Grace Edwards, Winter Park  
Mrs. Jos. R. Ellcott, Ormond

#### Affiliations and Organizations:

A. A. Coul, Jacksonville  
N. A. Reasoner, Oneco  
J. Leslie Whipp, Jacksonville  
H. O. Sebring, Sebring

#### Amendments and Revisions of By-laws and Constitution:

W. L. Drew, Eagle Lake  
Geo. V. Leonard, Hastings  
G. M. Wakelin, Tavares

#### Publicity:

Frank K. Anderson, Orlando  
A. A. Coul, Jacksonville  
J. C. Sellars, Jacksonville  
Edgar A. Wright, Tampa  
S. L. Frisbie, Tampa

#### Audits:

A. R. Sandlin, Leesburg  
L. A. Hakes, Orlando  
C. H. Thompson, Winter Haven

#### Nomenclature:

E. L. Lord, Gainesville  
H. Harold Hume, Glen St. Mary  
E. N. Reasoner, Oneco

## THE CITRUS INDUSTRY

T. Ralph Robinson, Washington, D. C.

#### Education:

L. H. Kramer, Lake Wales  
M. G. Campbell, Lake Wales  
A. A. Coul, Jacksonville  
W. J. Krome, Homestead

#### Foreign Seed and Plant Introduction:

R. H. Lindermann, Lake Wales  
James Donn, Miami  
J. C. Chase, Jacksonville  
J. S. Rainey, Miami

#### Plant Quarantines:

Wm. Sessoms, Chipley  
F. L. Skelly, Orlando  
Howard Phillips, Orlando  
H. E. Cornell, Winter Haven  
S. J. Sligh, Orlando

#### Ways and Means:

A. B. Michael, Wabasso  
W. S. Hart, Hawks Park  
S. C. Warner, East Palatka  
L. D. Niles, Lucerne Park  
Society Betterment:

W. J. Ellsworth, Blanton

C. H. Thompson, Winter Haven

B. F. Timinghast, Crescent City

#### Membership:

(to be appointed)

#### History and Necrology:

F. M. O'Byrne, Gainesville  
W. L. Floyd, Gainesville  
W. W. Yothers, Orlando

#### Legislation:

D. C. Gillett, Tampa  
M. G. Campbell, Lake Wales  
W. J. Krome, Homestead

A. A. Coul, Jacksonville  
C. E. Stewart, Jr. Tampa  
H. Harold Hume, Glen St. Mary

#### Transportation:

C. A. Martini, Bradenton  
H. S. McLendon, St. Augustine  
E. B. O'Kelly, Jacksonville

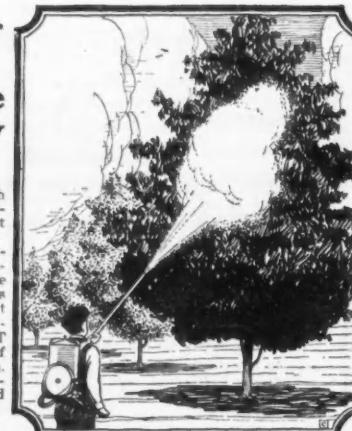
#### Local Arrangements:

(to be appointed)

A few rows of early sweet corn in the tomato field will reduce the damage from tomato caterpillars.

## Why Florida Growers Like the American Beauty Dust Sprayer

Growers who have had experience with other types of sprayers prefer the American Beauty because it is a simple, efficient dust machine that gives absolute, lasting, positive satisfaction. Its powerful blower forces CALISPRAY DUST to every leaf and blossom, eradicating pests and crop diseases.



## One Man Does the Work of Two Men and a Team

The big saving in time and labor expense soon pays for the American Beauty Sprayer. It weighs only eighteen pounds and is easily and comfortably carried on the back. Enables one man to cover 5 to 15 acres a day. Made of rust-proof materials and will last for years. Every part interchangeable and fully guaranteed. Send coupon for full particulars, name of nearest dealer and a FREE copy of our valuable spraying manual.

DISTRIBUTOR: E. O. Painter Fertilizer Co., Jacksonville, Florida

## THE CALIFORNIA SPRAYER CO.

6003 Pasadena Ave., Los Angeles, California

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Los Angeles, California.

Please send me your FREE booklet on What, When and How to Spray. I raise the following crops:

..... acres ..... acres ..... acres

..... acres ..... acres ..... acres

NAME ..... POST OFFICE ..... STATE ..... R. F. D. ..... Box .....



Calispray Products  
Get Results



**FLORIDA EAST COAST RAILWAY COMPANY  
FLAGLER SYSTEM  
INDUSTRIAL DEPARTMENT**

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**ASSOCIATED LAND COMPANIES**  
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J. D. Ingraham, Sales Agent

Model Land Company has large acreages of the best types of agricultural and grove lands for sale. Some of this land is situated in drainage districts; several of these districts have been completed, others are nearing completion; still other tracts of land are located where there is no special drainage necessary.

Chuluota Company has exceptionally fine residential property as well as agricultural and grove lands for sale, in a beautiful high, rolling, pine, fresh-water lake region of Seminole County. This is situated on the Okeechobee Branch of the Florida East Coast Railway, and can also be reached by splendid highways from either Sanford or Orlando. Climatic conditions are fine in this locality the year round.

All the land companies will sell in large or small tracts, cash or terms. Their lands are located in all the East Coast Counties; principally in the following: Monroe, Dade, Broward, Palm Beach, St. Lucie, Osceola, Seminole, Flagler and St. Johns.

For definite information or particulars write the Main Offices or the local agents for sale of the Company's lands.

**Local Agents Appointed for Sale of Lands**

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C. D. Brumley	Chuluota, Fla.
D. B. Austin	Port Pierce, Fla.
J. B. McDonal Co.	West Palm Beach, Fla.
M. C. Frost	Dania, Fla.
Pepper & Potter	Miami, Fla.
J. B. Reilly	Miami, Fla.
P. L. Wilson	Key West, Fla.
A. R. Livingston (Cape Sable Lands)	Homestead, Fla.
W. H. Phillips	Kenansville, Fla.
L. B. Bouchelle	New Smyrna, Fla.
Ralph Crosby	San Mateo, Fla.

Main Offices: City Building, St. Augustine, Florida.  
Jacksonville Office: 239 West Forsyth Street.

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ORLANDO, FLORIDA

Florida's newest and finest  
Commercial and Tourist Hotel.  
Special attention and courteous ser-  
vice to Floridians and commercial  
men.

250 Rooms—250 Baths

EUROPEAN — FIREPROOF

WURT. W. WARNER,  
Manager.

## CITRUS GROWERS!!!

Your Efforts Are Worthy of Results



IT IS POOR ECONOMY TO PURCHASE INFERIOR SULPHURS FOR DUSTING YOUR CITRUS TREES. SAVE TIME! One-half pound of FLOWERS of SULPHUR will do the same work as one pound of Crude Commercial so-called Dusting Sulphur.

SAVE MONEY! Be sure of your results! Purchase a sulphur with maximum fuming qualities. REMEMBER IT IS THE GAS THAT DOES THE WORK. Adulterating sulphur with lime to make it free running prevents the fuming action necessary to kill the Rust Mite and Red Spider.

SAVE WORRY! DUST YOUR TREES WITH 100% PURE "ANCHOR" BRAND VELVET FLOWERS OF SULPHUR.

It has stood the test of Time and proven its worth over forty years usage.

STAUFFER CHEMICAL CO. of TEXAS  
711 Scanlan Bldg., Houston, Tex.

Florida Distributors:

Chase & Company	Sanford, Fla.
Exchange Supply Co.	Tampa, Fla.
Florida Insecticide Co.	Apopka, Fla.

Jacksonville's Leading Hotel



Strictly Fire Proof. In the center  
of everything.

Rates:

With private bath \$2.50 up. Without bath \$2 up

**HOTEL SEMINOLE**

Chas. B. Griner, Manager,  
Jacksonville, Fla.

**DEZELL TALKS TO  
FLORIDA GROWERS**

E. G. Dezell, General Manager of the California Fruit Growers Exchange, was welcomed on his appearance in Orlando March 4th by an attendance of growers and shippers which very nearly filled the Circuit Court room.

Instead of making an address Mr. Dezell announced he would be glad to answer any questions which might be put to him. For almost two hours he was kept busy. Each question received a careful and apparently a frank and open answer from Mr. Dezell. In the course of the meeting these covered almost every phase of the citrus situation in Florida and in California and comparisons between the two. The meeting was pronounced a decided success by those who attended. These included not only members of the Florida Citrus Exchange, under whose auspices the meeting was held, but representatives from practically all of the shipping organizations in Orlando. While Mr. Dezell is General Manager of a co-operative marketing organization, the Independent operators who were present at the meeting united in saying that Mr. Dezell was eminently fair to them in his attitude as revealed by his answers to the questions propounded to him.

Mr. Dezell was frank in admitting that California growers were not happy over prices received thus far this season. Among other things he said that while the bugaboo of over-production had existed in citrus circle for many years, it was by no means certain that this point had yet been reached. Still, he said, the increase in citrus shipments from all sources for the last three seasons undoubtedly was running ahead of the increase in consumption which is rather more gradual.

The Floridians were greatly interested when Mr. Dezell stated that while the laws governing the shipment of green and immature fruit were practically identical in the two states that sentiment among the California growers and shippers had been responsible for reducing this to an absolute minimum in the last few years. He stated the color test has been discarded so far as California is concerned, and that sentiment forces the holding back of shipments until the fruit is able to pass fully the prescribed acid tests. When this is done, he said, there is an absence of the bad effect on the markets which are otherwise to be found when the fruit is shipped on a color test.

**THE CITRUS INDUSTRY**

**PROGRESS IN SATSUMALAND**

Continued from page 21

it to 800, but later developments showed that 1,500 bunches was a very modest estimate, for there were over 200 bunches on one small limb of an oak no larger than my arm. The Black Spanish makes the best pies and sauce of any bunch grape I know and is unexcelled for bottled juice.

We have a number of others that are promising to outrival the Black Spanish in robust growth and we hope to test them fully for fruiting.

Very truly,

C. E. Pleas.

**CITRUS DEMAND IMPROVES**

Tampa, Mar. 1.—General citrus market conditions for the past week are reviewed by George A. Scott, general sales manager of the Florida Citrus Exchange, in the following report issued here today:

"An improvement in the demand for both oranges and grapefruit has been noted in the large centers almost daily during the past week, but it was not until Friday that it was reflected in any advance of prices. Upon information received it was evident that moderate weather is resulting in a better demand and wider distribution from these auction centers which ought to result in a firmer tone.

"Tangerines continue to be scarce and wanted at most satisfactory prices. Unfortunately, the same conditions do not seem to exist in the western grapefruit markets. The demand is apparently fair to good but the buyers have definite ideas as to prices they wish to pay.

"The situation in the southern markets show no improvement whatever. In fact they are apparently not as strong today as they were a week ago. It is our belief, however, that this condition is not so much because of market conditions as the competitive quotations being daily received which makes it possible for them to buy at so very low prices. Quite heavy shipments of consigned fruit still continue to go forward to these southern markets. Undoubtedly, this is one of the greatest factors of the weakening of market conditions in the south, and apparently there is but little hope of much change so long as this condition continues to exist."

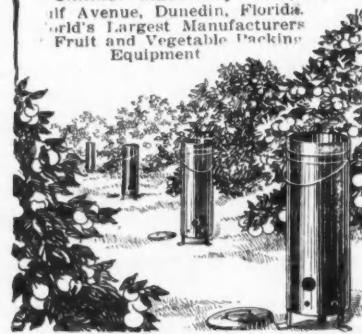
"Getting the Lord with you" isn't so hard, Mr. Farmer, if you'll select good land, prepare it well, use good seed, cultivate properly and mix in a little common sense now and then.

A soap and tobacco spray, properly prepared and applied, means death to the melon aphid. This insect is a destructive pest of cucumbers, cantaloupes, squashes, watermelons and other related plants.

# PlaySafe

SKINNER COKE HEATERS have positively proven their effectiveness in protecting Florida groves from damage by frost. Because of their efficiency, low first cost and economy of operation, they offer the very best means available for insuring citrus trees, fruit and truck crops against frost damage. SKINNER COKE HEATERS send out an intense radiant heat that frost cannot penetrate, thereby protecting buds, blossoms and the tenderest growth. Write for further particulars.

Skinner Machinery Company  
111 Avenue, Dunedin, Florida.  
World's Largest Manufacturers  
of Fruit and Vegetable Packing  
Equipment



If You Want a

**SUPERIOR GROVE**

**Plant**

**Superior**

**Nurseries**

**Trees**

**M. J. Daetwyler's**

**SUPERIOR NURSERIES**

**Orlando, Fla.**

For  
Bigger  
Better  
**Citrus  
Crops**  
USE  
**BRADLEY'S  
FERTILIZERS**

**Built Up to a Standard  
Not Down to a Price**



**The American Agricultural  
Chemical Company**

123 1-2 Main St.  
3rd Floor, Byrn Bldg      **Jacksonville, Fla.**

**Now Is The Time to  
Place Your Orders  
for Citrus Trees**

**Our Entire Stock is Complete in  
Every Line**

We have this season a complete line of all sizes and all varieties of citrus trees, on both rough lemon and sour orange stock, and are in position to handle orders for any quantity. These trees are as fine as any ever grown in Florida and comprise the choicest plantings of all the standard varieties.

The trees are thrifty, hardy, and free from blemish.

**ORANGES:** Parson Brown, Pineapple, Lue Gim Gong, Tardiff, Valencia, and Dancey Tangerines.

**GRAPEFRUIT:** Walters Excelsior and Marsh Seedless.

**Above All Else Be Sure Your Nursery Stock is the Highest Grade  
And True To Name**

The C. E. Thomas Nurseries have for years borne the reputation of selling guaranteed trees—trees which purchasers in every section knew they could rely upon absolutely—trees which would bear when and as they were represented to bear—in short that every tree sold by this concern was backed by unqualified guarantee of this company which ranks among the leaders in its particular pursuit.

**Avocado Culture Promises To Be  
More Important Than Citrus**

Mr. Popenoe, avocado explorer for U. S. government, states that he believes that the culture of avocados will some day become even more important than citrus culture in Florida and California.

It has been shown in California that the hardest types of avocados withstood a temperature of 21 degrees with injury

only to the young leaves, the trees themselves being uninjured.

Every grove owner should prepare to plant at least a small acreage to this popular hardy and profitable fruit.

We have several thousand and thrifty young trees of the best varieties now budded and ready for market.

**Agents Wanted in Every Locality**

**THE C. E. THOMAS  
NURSERIES**

**Tampa**

**Florida**

BRUEN-WEBB BUILDING

404½ Zack St.

# California Stealing Florida Thunder

That certain California interests are trying to capitalize on the popularity of Florida's citrus products is indicated in the following letter written by Mr. A. B. Michael, of Wabasso, Florida, to Mr. Frank Ahlberg, of Los Angeles, Calif. Not only are our Western competitors endeavoring to take credit for the production of Pineapple oranges, a distinctively Florida product, but they are also endeavoring to locate the Indian River on the Pacific slope.

Mr. Michael's Letter.

Wabasso, Fla., Feb. 13, 1924.  
Mr. Frank Ahlberg,  
Los Angeles, Calif.  
Dear Ahlberg:

We certainly hand it to some Californians for gall. Evidently some other Californians have either eaten our Pineapple oranges before or have talked with McDermont since his return from Florida or they would not have known what was best to serve.

The following quotation from a letter just received from a friend of mine is self-explanatory and I presume any further comment is unnecessary:

"It may be of interest to you to know that my other brother has just returned from New York where he attended the National Association of Dry Cleaners and Dyers at the Pennsylvania Hotel. He said Los Angeles, California, got the convention for next year, having won it by passing around oranges marked 'Blue Goose Indian River.'

"Someone on the research committee said, according to all records the Indian River was in Florida, and not in California, but they would grant California the convention if it could guarantee them as good a time as was the fruit they had just given away."

Very truly yours,

American Fruit Growers, Inc.  
A. B. Michael.

Evidently the California growers are overlooking no bets to capitalize on the reputation of Florida's superior citrus fruits.

MORE STOLEN THUNDER

The following letter of Mr. E. R. Oliver, freight traffic manager of the

Southern Railroad, shows still further discrimination against Florida citrus fruits in favor of the California product. We are very glad to note that this railroad official is taking steps to correct a very general and reprehensible practice:

SOUTHERN RAILWAY

Cincinnati, O., Dec. 26, 1923.

Mr. John L. Horgan,  
Manager Sinton Hotel,  
Cincinnati, O.

My Dear Mr. Horgan:

My attention has been called to your breakfast menu for December 17, 1923.

It carries item "California orange 20 cents."

I happen to know that substantially all of the oranges moving to Cincinnati during the month of December were from Florida and were hauled into your city over the Southern Railway.

As you know, the City of Cincinnati owns the line from Chattanooga to Cincinnati and it is operated by us under a lease from the City. But aside from all this, we are very much interested, and I believe you are, in the development and growth of the citrus industry in Florida. My guess would be that the Sinton Hotel gets ten guests who are interested in Florida citrus to one guest interested in California citrus. Unfortunately, our Florida citrus is not as well advertised as the California product, although I am personally convinced that it is of superior quality.

May we not hope that you will give our Florida product mention on your menus in the future?

Very truly yours,  
E. R. Oliver,  
Freight Traffic Manager.

The average Florida farm or range animal was worth only 40 per cent as much as the average for the United States as a whole in 1910. By 1914 it had reached 50 per cent; in 1920, 68 per cent; at present 75 per cent.

The average value of Florida's farm and range live stock, per head, increased from \$10.78 in 1910 to \$19.17 in 1924. But the average animal for the entire United States increased from \$25 to only \$25.35.

Winter is barely over and the plow is already in the ground.

In writing to advertisers, please mention The Citrus Industry.



## BEAUTIFY YOUR PROPERTY IN FLORIDA

Make it typical of Florida at its best.

Our Tropical Planting Book illustrates and gives full details of how to add to the attractiveness of your property by the right choice of plants, shrubs and trees.

Visit our nurseries if you can, but in any case, get this book of plants and planting facts. Sent free on request.

**REASONER BROTHERS  
ROYAL PALM NURSERIES**

Box E Oneco, Florida

# Helpful Service

CITRUS SCAB on grapefruit is present in a constantly increasing number of groves. It can be readily controlled if proper measures are taken at the **RIGHT TIME**. Examine the new growth. If scab in evidence spray **before** bloom opens with **SCNARRS BORDOL MULSION**, 1 gallon to 50 of water—follow with **LIME SULPHUR SOLUTION**, 1 gallon to 40 of water as the bloom sheds.

In many instances, particularly when a copper spray was not applied ahead of the bloom, Bordol Mulsion should be used when fruit has reached bird egg size. Spraying at this stage with Bordo Mulsion will also control **MELANOSE**.

The present fruit situation is the strongest possible reason why growers should intelligently work for a bright crop next season. Only good fruit will be profitable. Proper spraying is an economical form of bright fruit insurance.

Our service representatives will be glad to assist.

## J. Schnarr & Company

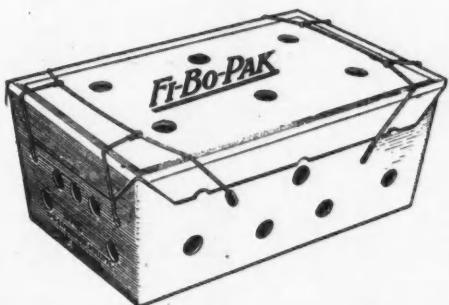
Manufacturers of

Schnarrs Standard Spray and Dust Mixtures for Florida

Winter Haven

ORLANDO

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## Fi-Bo-Pak Fruit & Vegetable Boxes The Last Word in Standard Containers

FI-BO-PAK Boxes are scientifically constructed to give maximum strength and protection, in minimum weight and space.

Made of specially processed, compressed fiber board.

Unusually light and strong.

No sharp or uneven surfaces to injure contents.

Scientifically ventilated.

Made waterproof by paraffining inside and out, which lessens evaporation of contents.

No nails required for sealing.

Wire fastenings included, which are easy to place.

Boxes come nested, ready for use.

Four sizes: 16-quart used for tomatoes, avocados, mangoes, and tangerines.

28-quart, 32-quart, used for beans, cucumbers, peas, peppers, corn, oranges, etc.

37-quart, used for lettuce, peppers and corn.

Fruit and vegetables packed in FI-BO-PAK Boxes reach the market in best possible condition and command highest prices. Write for proof of these statements.

## W. A. Merryday Company

State Distributors for FI-BO-PAK

Palatka, Florida.

## American Fruit Called for in Holland

American fruits are becoming nearly as well known throughout Holland as are locally produced fruits and fruits from Holland's colonies in the far east.

There has been a rather notable increase in the imports of American fruits at the present time, particularly apples and raisins, says the Food-stuffs Division of the Department of Commerce. A slight falling off, however, is noted in the imports of dried apples.

American grape fruit is being used in Holland to an increasing extent, but the import of this, as all other citrus fruits from the United States, are made by way of Great Britain so that it is impossible to secure any definite statistics as to the American portion of the trade.

The United States has furnished direct 595 metric tons of the 920 metric tons of canned fruit imported during the first 11 months of 1923. Most of the balance of the trade is in canned tropical fruits from the East Indies. The increase in the fresh apple trade has been especially notable since the import of such fruit from the United States heretofore has been a matter of serving the fine trade only, whereas now some of the finest quality American apples have been coming into the country at prices which enable them to compete with the more ordinary apples from Italy, Germany, and other nearby countries.

### GRAPEFRUIT IN HOLLAND

American grape fruit is being used in Holland to an increasing extent, but the imports of this fruit as of all other citrus fruits coming from the United States, are made by the way of Great Britain so that it is impossible to secure any statistics as to the American portion of the trade to the Netherlands.

Imports of dried apples have fallen from 2,243 metric tons in the first eleven months of 1922 to 2,098 tons in the same period of 1923. Of this the United States furnished 1,681 tons direct, in addition to other supplies by way of Great Britain. The United States also furnished direct 750 metric tons of prunes, besides a considerable portion by way of Germany. Total imports of prunes for the period amounted to 5,038 metric tons. Servia

has been the chief competitor in the prune trade.

### AUSTRALIANS TO FIGHT

#### FRUIT FLY

All of Queensland's fruit orchards are threatened by the ravages of the fruit fly. This pest has become especially prevalent in the Stanthorpe district, comprising about 1,000 square miles of fruit lands, where immediate steps must be taken to insure its destruction, says Consul Wormuth, Newcastle, in a report just received by the Department of Commerce. Authorities insist that the government take measures to provide for the destruction of diseased fruits in each infected orchard. "It is perfectly clear to any who knows the history of the Stan-

thorpe district," said one authority, "that either the fruit fly must come out on top, and the fruit industry go under, or the fruit industry survive by the absolute destruction of the fruit fly itself." All kinds of fruit grow in the infected area, which is from 2,300 to 3,500 feet above sea level and one of the principal fruit growing districts of Queensland.

Doc Hiller says: The greener parts of leafy vegetables, like lettuce, endive, cos, cabbage, etc., should not be discarded in being prepared for food. These parts are richest in the health-conserving vitamines.

### "COULD BETTER FERTILIZER BE MADE WE WOULD MAKE IT"

Before buying get our new January price list of our "SIMON PURE" and "GEM BRANDS" which have been the Standard of Quality for the past forty years with Florida growers.

1924 Almanac will soon be ready, write for one.

E. O. PAINTER FERTILIGER CO.  
Jacksonville, Florida.



## Citrus Fruits

must have plenty of nitrogen

Wherever used it has been shown conclusively that liberal applications of

## Nitrate of Soda

to citrus trees have caused better growth and increased production of first quality fruit. Secure your Nitrate from your nearest dealer and apply it early.

My Free Bulletin Service is issued for the benefit of those interested in improving the yield of any and all crops. Send me your name and address on a postal card if you wish to receive my bulletins as printed. To identify this advertisement add the number 2544

Dr. Wm. S. Myers, Director, CHILEAN NITRATE COMMITTEE  
25 Madison Avenue, New York

**WHEN EVERY  
MINUTE SPELLS  
PROFIT OR LOSS**

—when you have men, teams and material busy fighting some pest, it's a source of satisfaction and PROFIT to have a sprayer you can depend upon. And it's mighty important to have a service station near you in case something *should* go wrong. You enjoy both these advantages when you own a Hardie. Consult the map at the right and you'll see how we practically give "home town service on parts."

And not only do we have dealers in all the important fruit districts, but we have travellers who are constantly on the territory, in touch with *users* as well as prospective buyers. We make friends, and keep them. Just remember, that as a Hardie owner you'll seldom need service, but when you do need it, you'll get it. Send for catalog describing the many advantages and profits of owning a Hardie.

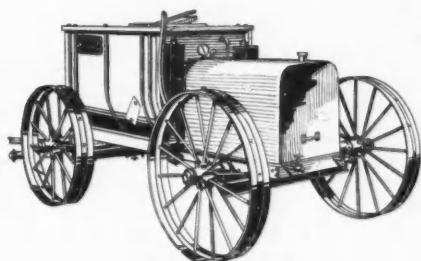
**GULF FERTILIZER CO.,  
Tampa, Fla.**

10 Branch Warehouses and  
Service Stations in Florida

**HARDIE**

**Dust-proof  
FLORIDA SPRAYER**

Light in Weight, Mounted  
Low, Pulls Easy, Powerful,  
Durable



# Pedigreed Citrus Trees

"No tree is a first-class tree unless budded from a bearing tree of a KNOWN quality and quantity of PRODUCTION."

**Ocklawaha Nurseries, Inc.**

Established 1897

**LAKE JEM, FLA.**

Telegraph Zellwood, Fla.

Long Distance Phone Victoria

# The Origin of Grapefruit

The following correspondence regarding the origin of grapefruit is self-explanatory and will be of interest to readers of The Citrus Industry:

Oneco, Fla., Feb. 23 1924.  
Mr. Frank K. Anderson,  
Orlando, Florida,

Dear Mr. Anderson:

Anent your article on grapefruit: it may be of interest to you to know that the old Whitaker homestead at Sarasota dates back before Indian wars. Col. Hamlin Valentine Snell of Va., one of the Whitaker friends, brought over seeds etc., from Cuba in late 40's and early 50's all sorts of fine fruits, including guavas, sweet oranges, shaddocks both pink and white—the pink was the best I ever saw, a real pink like the color of Foster g. f. and not the blood shaddock, also real grapefruit.

I have been here nearly 40 years; my brother came in 1882 and before his death we were very intimate with the Whitakers and ate all kinds of fruit there. I have a group of g. f. trees from the fruit produced there and when you are in this vicinity will be glad for you to eat some. The Royal g. f. has lots of near kin around here and my father named this one—Royal, and we disseminated it way back yonder.

My opinion is that the shaddock and SWEET oranges are the parents of the g. f. and the different types show it.

Some time when down here try and see Dr. Whitaker in Bradenton who can tell you lots of interesting details.

Your truly,  
E. N. REASONER.

Orlando, Fla., Feb. 27th, 1924.  
Mr. E. N. Reasoner,  
Reasoner Bros. Royal Palm Nurseries,  
Oneco, Fla.

Dear Mr. Reasoner:

Let me thank you very much for your letter of the 23rd.

One of my earliest recollections is of a large shaddock tree which stood in the north eastern corner of my Grandfather's yard at Palm Springs. The meat of this shaddock was pink like a Foster grapefruit, just like you mention on the Whitaker homestead.

Am very much interested to find it is your opinion that the sweet orange and not the sour orange is, together with the shaddock, responsible for

our modern grapefruit. Believe my own opinion that the grapefruit is the result of a cross between the shaddock and the sour orange partly has resulted from the shape of the grapefruit seeds which are unlike those of either the shaddock or the sweet orange yet, to my mind, show trace of the sour orange.

Four years ago when some of us backed Rex McDill in his by-products experiments near Tampa we found some interesting things at times, even if we made no money. One day a batch of grapefruit product which was being worked at one stage of the proceedings developed a distinct shaddock pink. Of course there was no visible pink in any of the Florida common grapefruit which had gone into this batch of product. This would seem to bear out very conclusively the theory that the shaddock is involved. On two other occasions there were things which inclined me to believe my theory of the sour orange being likewise involved was correct, but there was nothing which was as conclusive as was this in pointing to the

shaddock.

Please understand I have no ambition to become involved in any argument with such undoubted authority as yourself concerning the possible origin of grapefruit. I am simply stating the grounds which gave me my belief, and will be very glad indeed to learn of your reasons for believing the sweet orange to be responsible instead of the sour orange.

The first opportunity I get I want to visit the old Whitaker homestead, and I sincerely trust things may break so we can go together.

Yours cordially,  
FRANK KAY ANDERSON

Oneco, Fla., Feb. 29, 1924.  
Dear Mr. Anderson:

Thank you for good letter of 27th. Your observation on the matter of parentage of the grapefruit is more conclusive than mine, I judge from your letter, so will consider the sour orange one of the parents until T. Ralph Robinson proves otherwise.

Very truly yours,  
E. A. REASONER.

## THE VAN FLEET SPRAYERS AND DUSTERS



Owing to the general tendency of citrus growers towards the use of Power Sprayers and Dusters of large capacity to be operated by gasoline engines, we have given this part of our Product special attention, and desire to refer to the improved line of Pumps, Dusters and Gas Engines that are installed on our complete outfitts.

**SPROCKET** and **CHAIN** drive used in transmitting power from engine to pump.

**SPROCKET** and **CHAIN** drive used to operate agitator.

**TANK**—Cypress 200 gallon capacity, properly ironed.

**STRAINER**—Positive and simplified.

**DIMENSIONS**—Height 4 feet 3 inches, length 6 feet 11 inches.

**WHEELS**—30-inch front and 40-inch rear with 8-inch tires, spoke heads flush with tires.

**TREAD**—56 inches. **Axle**—4-inch dropped and of steel.

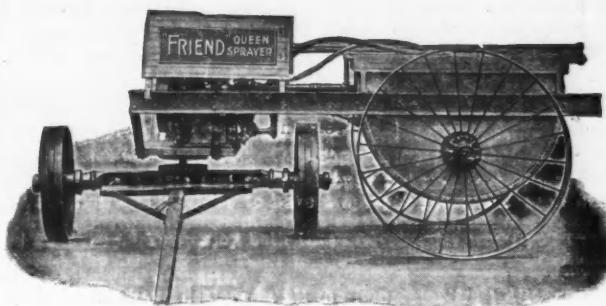
**FRAME**—4-inch channel steel.

**EQUIPMENT**—Two 50-foot lengths Rainbow Spray Hose 2 guns or 2 rods.

Submerged Filler attachment extra.

Prices upon request. County Representatives Open.

**THE VAN FLEET COMPANY**  
**Florence Villa, Florida**



THE  
"FRIEND"  
SPRAYER

Endorsed by hundreds of  
Florida growers

Don't wait until the last minute to place your order for a Sprayer.  
Do your investigating now, before you need it.  
If you have an old sprayer of any make, let us figure with you on putting a "FRIEND" Motor Pump on your present sprayer.  
Write for catalogue.

## Citrus Growers Supply Co.

State Distributors

303 Krause Bldg.,

Tampa, Florida

## Extra Values in Transport's Advance Construction

Transport models offer you greater truck values not only because they are built of the best specialized units, but because they represent in every single detail the highest attainments in motor truck engineering and designing. Transports embody every important advance which seasoned experience has proved practical.

The superior quality of Transport workmanship is reflected in the perfection of some of the most noteworthy features of motor truck construction, such as Automatic Chassis Lubrication—Transport's Improvement of the Drive Shaft Brake—and Specially Designed Radius Rod Equipment. A part of the extra value that goes with the Transport.

**Automatic Chassis Lubrication:** All parts requiring grease are equipped with nipples for easy coupling to the Alemite grease gun, which, with 500 pounds maximum pressure, positively forces the lubricant into the closest-fitting bearing and wearing parts, ejecting old grease, grit and dirt. The well and wick system is used on all spring bolts and radius rod bolts. By capillary attraction, oil is drawn the full length of bolt, and in the case of springs, an even distribution between all leaves is assured. This system saves you time and labor and assures more thorough lubrication.

**Drive Shaft Brake:** Models 35, 55, 60 and 75 are equipped with specially designed Transport Drive

Shaft Service Brake, which is positive in action and applies braking pressure equally on both rear wheels. This brake checks the tendency to skid when turning a corner by proper control of the faster traveling wheel. A spring cushion on brake rod prevents grabbing action of brakes resulting from too sudden application by driver.

**Radius Rod Equipment:** Two strong steel rods, one on each side of frame held in place by means of all-steel brackets, which are securely riveted and bolted to frame and rear axle respectively, hold rear wheels in perfect alignment and make it impossible for rear axle to slip on springs, assuring perfect operation of braking mechanism under all conditions.

## Bruce Motor Truck Co.

State Distributors

Tampa, Florida

**FLORIDA AS SEEN BY  
A NEW YORKER**

Continued from page 15

like a snappy epigram of Dexter Fellows of the Ringling Bros. Barnum & Bailey's Circus, only the social register hasn't set down "Dex" as a Floridian this winter summer. Sarasotans credit the slogan to Harry Green, formerly of The World and last year secretary of the Commerce and County Fair Association.

But one never can tell. There's Tony Cavalli, who's helping Mort Milford to represent Lee. He's a Floridian of not more than six months standing. Cavalli used to live in Port Washington, L. I., and he got the Florida fever in last September. He sold his boat, his cow and his horse, his flivver and his home—everything but his family, and cancelled his subscription to Bill Hyde's Weekly War Cry, which made Bill sore, and sailed away to the shores of Fort Myers.

**AND THE FAMOUS TAMPA  
CIGARS FREE**

Albert J. Stowe, Secretary of the Jacksonville Chamber of Commerce, is in charge of the Duval County exhibit, and is assisted by W. L. Watson and Miss Pearl Laffitte, who are handling the agricultural display. Jacksonville is the gateway to Florida and Mr. Stowe says: "We get 'em coming and going."

"Have a cigar," said "Rufe" Benziger, manager of the Tampa exhibition of smoke factories. "Fruit," bears, otters and alligators are not the only products of Florida. We have the finest cigars that ever perfumed a President's Cabinet or solaced the night life of a Senator. Try one. Oh, take SOME!"

They have as many cigar factories in Tampa as there are varieties of pickles—57—count them. They make them in Tampa, West Tampa and the village of Ybor, which latter is a Cuban colony.

Manager George T. Tippin of St. Lucie County, where they raise more fruit, palms, ferns and nuts, can't get snow out of his system. He and Jack Taylor of Collier's appeared in the Garden yesterday morning clad in Palm Beach suits. They were ambitious to show all the products of Florida, but last night they were dressed in furs.

They have discovered a new kind of fruit in Polk County, according to Frank J. Senn, representative of that fruit belt. The Department of Agriculture has named it a South African pear, but how it got into Polk County

**THE CITRUS INDUSTRY**

they can't imagine. When you open up a pear it perfumes the room with cinnamon and cloves, and when you let it lay for an hour it tastes like peach or pear brandy! Page Andy Volstead and all the scofflaws.

The Florida exhibition will remain open all through the week, up to Sunday night. On Friday all the school children of Greater New York are invited to attend free of charge, but this doesn't include parents or guardians. They have 30,000 feet of film at their display showing everything that is raised in the Flamingo State from the sea bed to the shipping point—oranges, ferns, vegetables, poultry, phosphate mines, sponge fisheries, candied grapefruit skins, strawberry beds, orange juice and cigars.

**ITALIAN FRUIT GROWERS  
HOPE FOR FROST**

Frost causes a lot of worry to our Florida and California citrus fruit growers but in southern Italy the orange and lemon orchardists are hoping for it. The continued hot weather

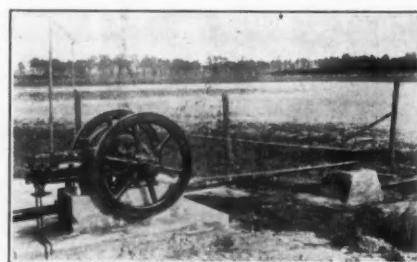
during the summer of 1923 greatly hampered the efforts of the growers in lessening the ravages of the citrus fruit fly with the result that in certain districts a large proportion of the fruit has been spoiled for export purposes, says Consul General Homer M. Byington, Naples, in a report to the Department of Commerce. The principal trouble with citrus flies has been in the vicinity of Naples. If a frost attacks the trees, the following season's crop is always very small. The fly with nothing to feed on dies or moves. In consequence, the crop of the next succeeding year is usually very large. Growers now state that a frost would be distinctly to their advantage even considering the prospective loss of the 1924 crop. The lemon crop in the Naples district for 1923 is said to be normal in quantity, although the hot weather during the summer has lowered the quality in some sections.

When horses went out of fashion in some parts of the country, they seem to have taken horse sense with them.

State Agent and  
Distributor

**Kimbrough  
and Skinner  
Irrigation Supplies**

Pumping Machinery  
Pipe Valves & Fittings



# D. E. FISHBACK

ORLANDO, FLORIDA

Phone 1743

West Livingston and R. R.

Contracting Engineer



Truck Farm  
and  
Grove Irrigation  
Installed Complete.

# CITRUS SCAB

is a serious disease of grapefruit in the springtime. To control, spray (1) into the bloom when the petals have partially fallen; (2) and again two weeks afterward; using

## IDEAL LIME SULPHUR SOLUTION

**(1 gallon in 40 gallons of water)**

Where the Scab is very severe and difficult to control, use IDEAL BORDEAUX-OIL EMULSION PASTE instead at a strength of one gallon in fifty gallons of water. Write us or consult any salesman of the Wilson & Toomer Fertilizer Company for prices and for further information concerning the control of this disease and other grove problems.

## USE BEAN POWER SPRAYERS

EFFICIENCY

ECONOMY

SATISFACTION



To be effective, spraying must be done at the right time and in the proper manner. Use the right type of sprayer. BEAN POWER SPRAYERS are giving universal satisfaction. Write for descriptive Catalogue and compare Bean Sprayer features with those of other makes.

# Florida Agricultural Supply Company

Lake Wales

Florida

Jacksonville

# The Peninsular Chemical Co.

By Jane Washburn

The Peninsular Chemical Company is one of the new organizations which is destined to carry the name of Orlando wherever citrus fruits are grown. The company is made up of men, all young men, who are putting ethical principles into a marketable product, with results already surpassing their expectations. The Peninsular Chemical Company's product is known as Emulso, and into it are put not only chemicals, but visions—and to that is attributable the rapid increase in their output.

Every man of the company is experienced in fruit growing, and brings to the organization the results of his personal knowledge; and the sum of their experience, crystalized through the company, is a greater force than their scattered efforts could bring to bear. S. Kendrick Guernsey is the president; R. H. F. Dade the vice-president; C. D. Walker, secretary; Charles R. Shafer, treasurer; L. R. Cambron, manager. They are all men who have Florida's interests at heart. Men who know and love the state, know the possibilities in perfecting the citrus fruits that Florida grows naturally with food value and sugar content that makes for the health of the individual, the prosperity of the state and in a thousand ways could be made a part of the daily diet of a hundred million persons.

That Florida shall produce none but the best is the vision of these men; that the output of their factory shall be the finest that chemicals can help to produce, in order that groves may yield their utmost, and that the quality may be the best—not last year's best but today's best—is ever in their minds.

They visualize the groves from the planting to the marketing. They see the trees—two years old, three, four, to the profitable bearing at five or six years. And in their vision the fruit is always bright. Not only because it will bring to the grower half a dollar more a box on the tree, but because all along the line from grower to consumer it will be the best possible fruit. They visualize it in some northern fruit store purchased for an invalid who should have the best; on transcontinental trains, where the day starts right or wrong with the orange juice or grapefruit at breakfast; in the picnic baskets for a thousand outings; in school

lunch boxes for hundreds of kiddies in isolated communities; or attractively displayed in the cafeterias of modern city schools; in hotels the country over, and in ten thousand healthful homes.

No one fruit grown in America has the universal approval that the orange has, no one fruit has a greater food value. Well worth making the best, not only "that the market affords," but the best that Florida soil, Florida sunlight, Florida enthusiasm and watchfulness of all that could retard can produce.

You think of a spraying composition as something rather disagreeable? You haven't seen Emulso. It has the creamy color and smoothness of the finest salad dressing, which it looks much like. Yet it is so effective that it is used in 65 parts of water.

The Company has been established only a few months, and at the beginning they talked in gallons and barrels, of this, that and the other thing needed, and of barrels to be shipped, but orders for carload shipments came with surprising suddenness and now they buy the raw material in carload lots. But however fast the business grows, the utmost watchfulness continues at every stage of production

and marketing, and the attractive label absolutely guarantees the quality within the container. It is the aim of the company to produce in Emulso not only the best spray possible, but to see that it is so used as to accomplish the results desired. They have an expert do the work, or tell the owner how to do it.

They will supply the quantity needed for a five or ten acre grove that can be applied with the ordinary equipment found in any grove, or they will furnish the necessary quantity and equipment for the largest grove in the state, and stay until the work is satisfactorily done.

Insects like Florida, the warmth of its sunlight the shelter of its fragrant growing things—but an orange grove is no place for their continued dwelling place. Scale insects, sooty mold, rustmite, red spider, they will come but they need not stay.

The Peninsular Chemical Company are also distributors for the Niagara Sprayer Company, manufacturers of Sulfodust, and the Niagara Grove Dusters. This company was selected not only because of their particular knowledge of Florida citrus problems, but because of the ethical principles

(Continued on Page 44)

## HOTEL HILLSBORO

Tampa, Fla.

### TOP O' THE TOWN

European Plan, Fireproof 300 Rooms With Baths

THE CENTER OF TAMPA

## T. W. RAMSEY

LUMBER

HOUSE AND BUILDERS SUPPLIES

WINDOWS AND DOORS

We ship large or small orders

17th St. and 6th Ave. TAMPA, FLORIDA Phone 51-219

# Recent Road Runs

## Showing Franklin Road Ability

### 200 MILES IN 4 HOURS, 22 MINUTES

Averaging 45.78 miles per hour  
E. A. Witte of Camden, N. J.

### 432 MILES IN 10 HOURS, 30 MINUTES

Louisville to Cincinnati to Indianapolis to Louisville  
Averaging 41.14 miles per hour  
E. G. Co fey of Louisville, Ky.

### 501 MILES IN 10 HOURS, 48 MINUTES

Averaging 46.38 miles per hour  
Ora Zimmer of Champaign, Illinois

### 773 MILES IN ONE DAY

Over Illinois roads, starting from Champaign  
Two prospective buyers who had never before driven a Franklin alternated as drivers

### 478 MILES IN 11 HOURS, 15 MINUTES

Averaging 42.48 miles per hour  
Dr. Durham of Louisville, Ky.

### 683 MILES IN ONE DAY

20½ hours, actual running time  
E. C. Hunt, Jr. of Flushing, N. Y.

### 3518 MILES IN SEVEN DAYS

Averaging over 500 miles per day  
E. L. H. Stevens of Flushing, N. Y.

Some of these runs were made by owners in the course of regular use. Others, by Franklin salesman while demonstrating the car to prospective owners. In only four cases did the driver start out with the express purpose of setting a record. All were made with stock cars.

The Franklin can out-distance others over a day's run because it can maintain a faster average pace over all going. Its safety and easy handling permit this—its riding comfort encourages it. Particularly with the 1924 Model—the greatest car Franklin ever built.

### 10,265 MILES IN 24 DAYS

Averaging over 429 miles per day  
Ora Zimmer of Champaign, Ill.

### 778 MILES IN ONE DAY

Over California and Oregon roads  
Rupert Larson of Los Angeles, Calif.

### 402 MILES IN 10 HOURS, 12 MINUTES

Syracuse to Ottawa, Can. and return  
Charles Huddleston of Syracuse, N. Y.

### 331 MILES IN 7 HOURS, 33 MINUTES

Detroit to Grand Rapids and return  
Averaging 43.84 miles per hour  
C. B. Messmore of Detroit, Mich.

### 455 MILES IN 14 HOURS

Canastota, N. Y. to McKeesport, Pa.  
Dr. G. M. Pierce of McKeesport, Pa.

### ACROSS THE CONTINENT IN 13 DAYS

Syracuse, N. Y. to Stockton, Calif.  
Total of 3720 miles—averaging 286 a day. Car just delivered—  
brand new  
E. P. Llewellyn of Stockton, Calif.

# 1924 Franklin

**The Greatest Franklin in 22 Years**

OWEN-FRANKLIN MOTOR CO., Tampa, Fla.

FRANKLIN-MIAMI CO., Miami, Fla.

FRANKLIN MOTOR CAR CO., Orlando, Fla.

## Bearing Time of Citrus Trees

A reader of The Citrus Industry, at Falfurrias, Texas sends the following inquiry in regard to the bearing time for citrus trees:

Falfurrias, Tex., Feb. 29, 1924.  
The Citrus Industry,  
Tampa, Fla.  
Gentlemen:

About a year ago I bought land and planted several hundred Citrus Trees. I am reading your paper with great interest. There is a question which nobody has answered satisfactorily, that is:

How soon, after planting a young grove, can you expect fruit?

One party told me the third year you may look for a dozen oranges, the next year after that for half a box, that seems plain enough, but when is the 3rd year? Does time count from the period the young tree was grafted in the nursery or does time begin to count when you take the tree from the nursery and transplant it in your grove?

I feel, that a great many people besides myself would like light on that subject.

I am assuming normal conditions, good warm sandy soil and good care.

Your truly,

F. A. GARTNER.

Answer—Counting the time at which citrus trees should bear begins at the

time when the trees is transplanted from the nursery to the grove. Your informant is correct in stating that you may look for a few oranges the third year after planting. It is not unusual for trees to bear a little fruit the second year after being planted in the grove, but most growers consider this too soon to permit a young tree to bear, and usually the buds are picked off to prevent the fruit from forming. By the fourth year it is not at all unusual for trees to produce a half box of fruit.

### ITALIAN LEMON CROP SMALLER

The lemon crop of the Palermo district and Sicily in general is estimated by the trade to be about one-fourth less than that of the previous year, says a report to the Department of Commerce. The decrease is due to the late beginning of cultivation this year as last year's crop was delayed. There have been but few shipments to the United States so far because it is said of the abundant crop of California lemons and the restrictions imposed by American authorities. The demand from central and northern European countries is however reported to be larger than last year so that prices have remained normal. Growers are selling at from 35 lire to 40 lire per thousand in the orchard.

In writing to advertisers, please mention The Citrus Industry.

**MYERS**  
HONOR-BILT  
SPRAY PUMPS

Absolute necessity for the successful citrus grove. Unequalled for easy, rapid, thorough spraying. Every desirable style and size. Hand Pumps with easy operating cog gear handle—Power Pumps with automatic pressure control—give powerful penetrating spray that reaches every leaf and blossom, every nook and corner. The Myers line includes Pumps for Every Purpose, Hay Tools and Door Hangers. Ask your dealer or write us.

THE F. E. MYERS & BRO. CO.  
225 Church St., Ashland, Ohio



(22)

### TAMPA Business College

Grand Central Ave.

The Big BUSINESS COLLEGE of Florida offers you high-grade employment in the fastest growing city. All modern commercial subjects, including Telegraphy. Open all year in our new building. No entrance examinations. Large faculty, and fine equipment. Enroll NOW. Free souvenir and catalog by sending this ad.

Your Name \_\_\_\_\_

Address \_\_\_\_\_

## Twenty Years of Experience

and close study of Florida soils and their needs, particularly as regards Citrus Crops, produced

### BETTER QUALITY FERTILIZERS

They are right as to availability, sources and mechanical condition.

Write for further information.

### Trueman Fertilizer Company

Jacksonville, Fla.

Agricultural Chemicals

Special Mixtures

Insecticide Materials

# Oldsmar Frost Protectors

Sturdy and reliable, giving you, year after year, the dependable service that is built into them.

Self-contained, carrying in their base sufficient fuel for a night's firing, they are easily and rapidly refilled and ready for another night's work should they again be called upon.

Reliable, durable and economical, Oldsmar Frost Protectors have no rival in the grove heating field. Low in initial cost, built to outlive the grove they are installed in without upkeep expense, Oldsmars are an investment that pays handsome dividends.

Asking us to demonstrate Oldsmars to you in your own grove obligates you in no way.

Phone, wire or write,

**Keller Heating Company**

Oldsmar, Florida

**THE PENINSULAR  
CHEMICAL COMPANY**

Continued from page 40

they were applying to their business and their successful efforts to assure the growing of the best fruit that this wonder state of Florida can be depended upon to produce.

Fitting it is indeed, that this company should establish itself in the county significantly named Orange, and in the city of Orlando, which is headquarters for many of the citrus agencies of the state, and through which three-fourths of the whole fruit crop of the state is marketed.

Poor seed is a main cause of poor stands.

**CLASSIFIED ADVERTISEMENTS**

The rate for advertisements of this nature is only five cents per word for each insertion. You may count the number of words you have, multiply it by five, and you will have the cost of the advertisement for one insertion. Multiply this by the total number of insertions desired and you will have the total cost. This rate is so low that we cannot charge classified accounts, and would, therefore, appreciate a remittance with order. No advertisement accepted for less than 50 cents.

**REAL ESTATE**

**FOR SALE**—5 and 10 acre farms, all cultivated ready for seed. \$100 per acre on easy terms. American Development Co., Arcadia, Fla. 2t

ONLY \$1,000 DOWN gets LAKESIDE 200-tree bearing orange grove, 5-room house, 22 acres fine fruit trucking soil, borders two beautiful lakes; fishing, boating, bathing, good neighbors, 2 miles to town, high school; only \$3,000 to close estate. Stuart R. Greiner, Eustis, Fla. 1t

10 ACRE ORANGE, grapefruit grove, 6 years old, Lakeland Highlands, next to Haskell Townsite on Dixie Highway, near Haskell station and packing house. Owner, H. J. Strimple, Penns Grove, N. J.

THE GROVE YOU WANT—You'll find it fully described and correctly priced in our new booklet "Groves and Farms" just issued. Send for copy. Dotson & Company, 816½ Franklin St., Tampa, Florida.

WILL EXCHANGE West Texas cattle ranch for unimproved or improved land in Florida. What have you? Give price and full particulars. T. E. Bargett, 8410 McKinley Ave., El Paso, Texas.

EARLY BEARING Papershell Pecan trees, budded or grafted and guaranteed. Great shortage this year. Write for catalog today. Bass Pecan Company, Lumberton, Miss.

Want to hear from owner having farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wisconsin.

**NURSERY STOCK**

**POLK LAKE NURSERIES**

Offer to the grower young trees of standard variety, backed by 30 years of nursery experience and a guarantee which only honest dealing can justify. For full information address A. H. Sloan, Box 413, Bartow, Fla.

BANANA PLANTS for sale. Improved Cavendish, Hart, Orinoco, Ladyfinger. Information free. W. E. Bolles, Oldsmar, Fla.

**THE CITRUS INDUSTRY**

**PAPER SHELL PECAN GROVE.** Most trees 12 and 13 years old, which is full bearing age. Good condition. Forty acres. Located near Monticello, Fla. Price \$500.00 per acre. Simpson Orchard Co., Vincennes, Ind.

100,000 sour and 100,000 sweet seedlings ready to line out in nursery, all free from disease and in thrifty condition; bargain for quick sale. Edward H. Hopkins, Reddick, Florida. Nov. 4t

**FOR SALE**—Peas and velvet beans of all kinds. New bags, even weights. All peas recleaned. H. M. Franklin, Tenny, Fla. Mar.-4t

**AVOCADOS AND MANGOS**

Buy your avocado trees now. We handle the famous John B. Beach avocado trees exclusively. Guaranteed absolutely immune from the dreaded avocado scab. Write now for information and give us your order as soon as possible for the supply is limited. Quality Nurseries, W. D. Sperry, Sole Proprietor, Lakeland, Fla.

**MISCELLANEOUS**

**FOR SALE**—One second hand Wallis tractor in A-1 condition. Will sell cheap for cash. King Lumber and Manufacturing Company, Nocatee.

**WHITE WYANDOTT** Cockrels, regular strain—the best in the country, direct from Martin pens. Utility and show birds \$5.00 each; also eggs for hatching \$5.00 per 15. W. A. King, Gen. Del., St. Petersburg, Florida.

**FOR SALE**—Dairy and stable manure, car lots. Link & Bagley, Box 464, Tampa, Fla. 6t

**SOUTHDOWN SHEEP**, White Rocks, Toulouse Geese, Guineas, Angora and Milk Goats, Circular free. Woodburn, Clifton, Va.

**FLORIDA INVITES YOU**—Write today for our new grove list in Supplement No. 4 to our regular booklet. It's full of bargain offerings and more than likely contains full description of the very grove you'd like to own. Dotson & Company, 816½ Franklin St., Tampa, Florida.

**JELLY GUAVAS.** Our guava "Snow-white" is the finest jelly guava ever grown. Nice plants 25¢ each, \$2 for 10; \$18 for 100. Send for free catalog of other fruits and flowers. Royal Palm Nurseries, Oneoco, Florida.

**LISTEN** to something good. Grapes are the coming fruit crop for orange growers, or anyone who wants a good paying summer crop. Quick returns, small expense. We have well rooted plants of the following varieties: Carmen, Munson, Ellen Scott, and Malaga, also many other varieties. Can furnish cuttings all through winter. Plant now. T. B. Gautier, Box 151, Orlando, Fla. Nov. 1t

**FOR SALE**—Two Gas Engines, Wood Saw, Fireless Cooker and Cane Mill. R. O. Connor, 434 East Bay, Jacksonville, Fla. Jan 1t

**WANTED**—To hear from owner of farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

**FOR SALE**

Remington Portable Typewriter with standard keyboard. Has all advantages of larger machine. Ideal for farm and home use. \$60. cash or sold on easy terms. Remington Typewriter Co., 103 Parker St., Tampa, Florida.

**WE ARE STATE DISTRIBUTORS FOR:** Witt Gasoline Engines, Log Saws, Buzz Saws.

Paul Water Systems, Tanks and Supplies.

St. Marys Crude Oil Engines. Estimates on Complete Installations on request. Write for catalog and prices. RUPRECHT AND COMPANY, 211 Grace St., Orlando, Florida



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V-C stands for more than just a fertilizer. It means that strictly high-grade materials only have been used and that the manufacturing has been done in the best possible manner.

V-C stands for quality both of goods and service and means that part of the integrity of this Company has been manufactured into each sack.

V-C stands for the best that can be had in fertilizers. If they could be made better, we would make them so.

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If you have grove problems, our Horticulturist will be glad to give you expert service without charge.

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Sanford, Winter Haven, Manatee, Vero, Winter Garden now built or being built and stocks at many other points.

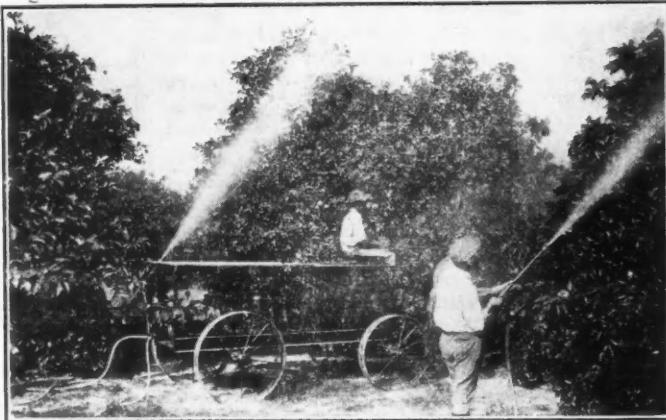
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Jacksonville, Florida



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You have seen all types made—consider prices F. O. B. Orlando, Florida on our machines and products.



## Our Equipment

200-gallon all-cypress tank, Myers Triplex Spray Pump, Witte 3 H. P. Gas Engine, two 50-feet lengths best hose made, with two spray guns, steel six-inch wide wheels, steel axles, steel channel frames. Price \$475.00 F. O. B. Orlando, Florida (Not \$585.00 or more) includes Tongue, Neckyoke, Doubletrees.



## Our Equipment

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Our extension handle tree saw is proving a winner—just what they all wanted. Do you need one? J. I. Case T. M. Co. 12-20 Sand-proof Tractors—combination tractor and roller—5-ton—for road building. "Road Razors," a combination powered grader, run by one man—in 9 hours using 9 gallons gas, 1½ quarts oil, doing work of two common grading machines and 8 mules and six men. Ask us to show you.

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# Orlando Manufacturing Company

211 Long (Grace) Street      Phone 590W

Orlando, Florida

## Household Hints

Weekly From Home Demonstration Specialists, Tallahassee

### To Remove Grease Spots

To remove grease spots from woolen materials, use vinegar instead of gasoline, as the vinegar removes it much quicker and does not leave a ring.

### To Remove Gum

The white of an egg will remove chewing gum from anything. Rub the egg-white on the gum and it removes it from cloth, hair or hands without leaving a spot.

### To Clean Silver Purse

To clean silver purses cover with buttermilk and let stand over night. Wash well in tepid water. Table silver can also be cleaned in this way.

### To Clean a Soiled Hat

To remove dirt or stains from a colored hat caused by the grease of the hair or by the collar's rubbing against it, try rubbing the hat with a cloth soaked in benzine. The dirt will disappear instantly.

### When Gasoline Leaves a Ring

Sometimes when removing a spot with gasoline it leaves a ring around the part cleaned. This can be removed by holding it in the steam of the tea kettle.

### To Clean a Sieve

Put salt on the sieve part of the strainer and rub several times. Wash and rinse thoroughly and the strainer will be thoroughly clean.

### To Remove Water Stains From Furniture

To remove hot water marks from polished furniture, dampen cloth in denatured alcohol and rub lightly over the spots. Let stand for a few hours to dry. If all the marks are not removed, apply again after the furniture is dry.

### If Clothes Stick to the Line

If you use a steel clothes line, wipe with a little kerosene in cold weather and the clothes will not stick to the line.

### To Remove Bits of Shell

When breaking eggs, pieces of shell sometimes fall into the bowl and it is difficult to remove them. By touching these small pieces with the half eggshell they can be removed easily.

### Making Soap

Use 5 pounds of fat, 1 can of lye, 1 tablespoon of powdered borax,  $\frac{1}{2}$  cup of ammonia,  $\frac{1}{2}$  cup of gasoline, 1 liberal quart of rainwater. (Rain water is not necessary, but desirable.) Add the can of lye to the water and

stir till dissolved. Add warm (not hot) grease and other ingredients and stir well. Pour into a square granite pan and when firm, cut into bars.

If bacon fat is used and it is very salty, it should be washed of the salt. Otherwise it will harden too fast, as salt is the ingredient used in many soap receipts to harden it. A perfectly good soap is the result of salt bacon fat, but it curdles without cohesion, at first. It can, however, be mashed until it sticks together.

All beef fat or mutton tallow makes a soap which floats. It should be stirred as little as possible and the proportion of water should be reduced.

The happiest combination of fats is part suet, part tallow, and part bacon, with bacon fat in the largest proportion. Such liquid fats as olive oil make an admirable soap, although rarely available or kept in quantities.

### Hard Soap

Use 8 pounds of grease, 17 quarts of rain water, 2 boxes of potash,  $\frac{1}{4}$  pound of resin,  $\frac{1}{4}$  pound of borax. Boil for an hour before putting in the resin and borax. After it is well mixed and boils up it is done.

### Suggested Menu

Cherry Cocktail

Baked Chicken

Brussels Sprouts

Glazed Sweet Potatoes

Crabapple Jelly

Red Cabbage Salad and Cheese Straws

Washington Pie

Salited Nuts Tea or Coffee

Cherry Cocktail

This may be made from red or white canned cherries. Stone the cherries and drain from the liquid. If very sweet, add lemon juice enough to give a tart taste. Chill in the ice box. Serve in cocktail glasses and sprinkle with shredded cocoanut. Grapefruit may be combined with the cherries if desired.

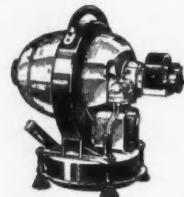
### George Washington Hatchets

Mix and sift 2 cups of flour and  $\frac{1}{2}$  cup of brown sugar. Wash  $\frac{1}{4}$  cup of butter and work into the first mixture, using the tips of the fingers. Roll till it is a third of an inch thick and cut into hatchet-shaped pieces. This cutting can be done easily by using a sharp knife and a pasteboard model or pattern. Brush over each piece with the yolk of an egg diluted with  $\frac{1}{4}$  teaspoon of water and garnish each with half a candied cherry. Bake in a slow oven.

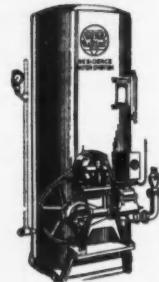
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